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THIRTY-SIXTH

# ANNUAL REPORT

OF THE

# BOARD OF PUBLIC WORKS

TO THE

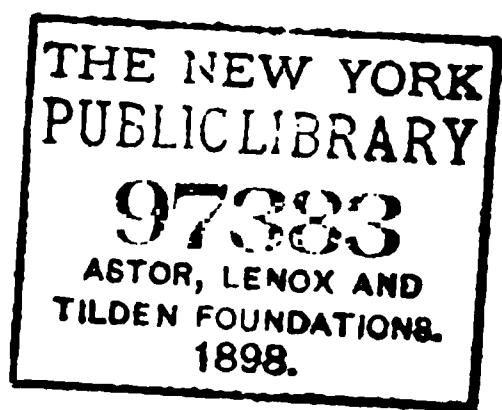
# GENERAL ASSEMBLY OF VIRGINIA,

WITH THE

# ACCOMPANYING DOCUMENTS.

1851.

*3/11*





## REPORT.

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The Board of public works beg leave to call the attention of the legislature respectfully to the views embraced in the following

### REPORT:

The delicate and multifarious duties devolved upon this board by recent legislation, and the eminent importance of the interests committed to its care, require of it at this time a more extended and detailed report than has heretofore been customary. It is highly important, too, to the credit of the state in the markets of the world, that an authentic and official exposition of the character of those public works in which she is engaged, and upon the success and productiveness of which her financial prosperity chiefly depends, should be given to the public.

Probably no state in the Union has in a few years so radically changed its policy upon the subject of internal improvement as Virginia. The revolution in public opinion has been almost complete. Scarcely a section of our widely extended commonwealth is not awake to the transcendent importance of the subject. The natural and deep rooted prejudices which were formerly so generally entertained by the people against taxation for any but the most necessary public purposes, are rapidly giving way. Not only are the representatives of the people in the legislature of the state voting large appropriations at every session to public works, but the people are also themselves voting directly for liberal subscriptions to the same purposes, by counties, cities and towns, in every quarter of the commonwealth. It will be gratifying to those who are in the habit of believing our state still slothful and blind to her true interests upon this subject, to know that Virginia contains now nearly seven hundred miles of completed railway, that she has nearly seven hundred additional miles in progress and under contract, together with some three hundred of still additional miles projected and subscribed for. Besides these railroads, she has about 872 miles in length of the most capacious and substantially constructed canals in the Union, and turnpike roads, a large portion of them, of the first order of grade and construction, measuring about 3000 miles in length; all of which last, if not financially remunerative to the state treasury, are inestimably valuable to the agricultural and industrial interests of the state. In addition to the works already mentioned, large subscriptions have recently been made towards plank roads—a species of improve-

ment second in value and usefulness to none other—some of which are partially completed, and considerable distances of which are in rapid progress. This entire system of works when, completed as far as subscribed for, will have produced a public indebtedness of only about \$20,000,000, a large portion of which cost, as has already been stated, will have been productive long before this aggregate indebtedness will have been reached. The expenditure of this large sum of borrowed capital leaves the commonwealth, not prostrate in repudiation, after the examples of so many states that have been her pioneers in like undertakings, but with her bonds commanding high premiums in the markets at home and abroad, and with her credit ranking favorably with that of the wealthiest states in the Union.

The annexed table presents a condensed view of railroad progress in the state, together with the interest of the state in their capital stock.

	Length.	Completed.	In Progress.	Capital Stock.	State's Interest.
	Miles.	Miles	Miles		
Appomattox railroad, (late City Point,) -	9	9	-	100000	-
Clover Hill railroad, - - - - -	11½	11½	-	250000	-
Blue Ridge railroad, - - - - -	16½	-	16½	600000	600000 00
Greensville and Roanoke railroad, -	21	21	-	289100	-
Manassas' rap railroad, - - - - -	103	-	60	800000	320000 00
Orange and Alexand. railr'd, (includ'g branch,) -	98	30	-	1037500	600000 00
Petersburg and Roanoke railroad, -	60	60	-	769000	-
Richmond and Petersburg railroad, -	22	22	-	685600	385600 00
Richmond, Fredericksburg and Potomac railr'd,	76½	76½	-	1000000	275200 00
Southeastern railroad, - - - - -	122	30	75	1400000	480000 00
" " " " " " " " " " " "	-	-	-	-	325500 00
Tuckahoe and James river railroad, -	4½	4½	-	68600	-
Seaboard and Roanoke railroad, - -	95	80	15	600000	-
Virginia Central railroad, (to Gaston,) -	195	105	90	1817300	1094800 00
Virginia and Tennessee railroad, (to Camton,) -	209	50	100	1000000	1000000 00
Winchester and Potomac railroad, -	32	32	-	83333	83333 33
Richmond and Danville railroad, - -	147	46	101	2000000	1200000 00
Northwestern railroad, - - - - -	100	-	-	1500000	-
Baltimore and Ohio railroad, (in Virginia,) -	240	99	141	-	-
	16024	6761	636	\$16117100	7364433 33

Length of railroads in Virginia,	-	-	-	1602½ miles.
"          "          completed,	-	-	-	676½ "
"          "          in progress, (under contract),	-	-	-	636½ "

Capital stock, (leaving out Baltimore and Ohio railroad,) ..	\$16,117,100 00
State interest, " " "	" 7,384,433 33

The works enumerated in this table will in a few years, when all of them are completed, constitute a system of railways possessing capabilities for greater commerce than any others of similar length in the United States. There will be, first, as a basis of the whole system, a line of road extending from the banks of the Potomac to the North Carolina line, crossing all the great streams of the state near *the head of tidewater*. By means of this line of roads the products

borne down upon those streams, and upon the various railroads running westward from it at right angles, are received and borne to the most eligible commercial points along their route. The country through which this line of roads passes, if not now in all its extent one of great fertility, is capable of being rendered so in the highest degree by the application of guano and marl, which they render accessible to it, and which seem magically adapted to the speedy and complete restoration of its soil.

Upon this base line of railway will rest four of the most important public works projected upon the continent.

1. First and southernmost among them is the Danville railroad. It traverses the great southern region of the state, crossing the fertile valleys of the Appomattox, the Staunton, the Banister and the Dan rivers, which constitute probably the finest tobacco region in the world, and penetrating to that most productive portion of North Carolina which lies along the eastern base of the Blue Ridge mountains. It will ultimately form a connection with the Georgia and South Carolina network of railways, and bring to our state an immense southern as well as local commerce.

2. The second great railroad that leaves the base line in question, is that of the Virginia and Tennessee company, in connection with the Southside road from Lynchburg to Petersburg, and its projected extension to Norfolk. Threading the most productive portions of the James river valley; thence penetrating the whole extent of that prolific bed of mineral and agricultural wealth which lies between the Alleghanies and Blue Ridge south of the James river; thence connecting in Tennessee, by works already in progress, with the Georgia and South Carolina railway systems, with the Mobile and Ohio road, and with the Mississippi river at Memphis, where it will participate in all the advantages that are to result from the projected railway connections of that city with New Orleans, with the Western Mississippi country, and ultimately with the Pacific ocean—it is impossible to appreciate adequately the importance of this work to the state, or to overestimate the stupendous results of its future operations. It will tap the Mississippi river at a point below the mouths of its largest tributaries, where the whole trade of that river and those tributaries can be reached. It will pierce the valleys of the Tennessee and Cumberland rivers, and be accessible to the trade of the whole state of Tennessee. By intersecting the Mobile and Ohio road, it will be in railway connection directly or indirectly with the entire eastern half of the valley of the Mississippi.

Such are the promises of the main stem of this road to the commerce and wealth of the commonwealth. Besides this main stem, routes are feasible for a branch road, diverging from it at the Horse-shoe bend of the New river and extending to the Ohio river, either at Louisville or at any one of several eligible points, in the option of the state, higher up that stream, which promises the same results in regard to Kentucky and the Ohio valley as are promised by the main stem in regard to Tennessee and the Mississippi valley.

3. The third great railway diverging from the base line of this sys-



tem, is the Virginia Central road. It traverses a section of the state entirely distinct and separate from that which is tributary to the Virginia and Tennessee road. It is a necessary outlet to the trade of the counties along its completed and projected route. Considered as a local work, accommodating the trade of a large, populous and fertile region of country tributary to it, it is second in importance to no other work of the kind in progress. It is destined to secure to the cities of Virginia a large and immensely valuable trade that would otherwise inevitably go off to cities of other states. It would command an immense eastern and western travel, and would bring to our mountain watering places, from all parts of the Union during the summer season, countless numbers of visitors. Both as accommodating the trade of numerous counties of the state that would have no other easy access to market, and as securing to Virginia a large portion of wealth which would flow beyond her borders into other states, this work is of the first importance. But its local character is not its most interesting one. It will be chiefly important, when completed to the Ohio, as a continental highway. Taking its departure from Richmond, upon the head of tidewater, at a point upon the James river whence that stream is diverted by high bluffs from the direct course it seemed pursuing, to the nearest point upon salt water, (at Eltham, near the mouth of York river) this road, as constructed and projected, penetrates through the entire centre of the state to the Ohio river at the mouth of the Guyandotte. It will afford transportation for all the rich and varied products of that portion of our own state lying between its termini, embracing minerals the most valuable and abundant, including coal, iron and salt. It will strike the state of Ohio at its extreme southernmost point, where, consequently, access to its terminus by water will be least obstructed by ice, and not far from Portsmouth on the Ohio river, from whence a continuous line of canal communication extends through the centre of that state to Lake Erie. Egress from this lake to New York can only be had at a point four degrees northward of Guyandotte, where, consequently, the waters would be closed by ice some sixty days sooner. The canals of Ohio, running from north to south, would therefore be feeders of this road for several months in the year without a rival, not only during the months of actual ice in the northern lakes and canals, but during all that portion of the fall while ice is apprehended. In addition to the advantages held out by these water communications serving as feeders to this road, including the Ohio river itself, it must be remembered that Cincinnati, with her energy, public spirit and capital, is straining every nerve to form railroad connections with the most advantageous Atlantic seaports. The immense trade of that city will be ours, if we but furnish for it the strongest attractions. The magnitude of the capital and the importance and value of the commerce which are concentrating at that city with astonishing rapidity and in amounts almost beyond belief, will be best understood by considering the extent and character of country contributing to its wealth. That city has so thrown out her lines of improvement, and is so advantageously located, *that she has become the centre to which not only all the commerce*

of Ohio tends, but also a great part of that of Indiana, Illinois and Michigan. Extensive and fertile regions of Kentucky and Virginia contribute their trade also to swell the wealth of this western emporium. Possessing these great means of wealth and power, Cincinnati has long understood the vast importance to herself of opening the shortest, cheapest and most direct line of communication with the Atlantic ports. The lines of transportation she has projected have been chiefly directed towards New York and other northern cities, because her efforts and labors to accomplish her great objects were responded to there in a manner best calculated to ensure the accomplishment of her aims, and not at all because those commercial localities were the most preferable to her. The Virginia Central railroad points from the nearest Atlantic seaport directly to this enterprising and wealthy city, which seems to concentrate the capital and commerce of the Ohio valley. It offers the shortest transit from her wharves to the seaboard. It presents for her trade far easier grades than any rival road north of it. Its construction will cost less than any road that has ever been carried over a mountainous region of country. Mountain barriers, elsewhere so difficult to overcome, are in Virginia scarcely obstacles at all. A water communication is perfectly practicable over this route. A railroad is comparatively of easy accomplishment.

Much of what has been said concerning the Central railroad is equally applicable to a branch of the Virginia and Tennessee road, which might be extended from New river, at the Horseshoe bend, through Lexington, Kentucky, to the Ohio at Louisville, connecting with a railroad already constructed, seventy-five miles in length, between Lexington and Louisville.

4. The fourth line of railway resting upon the base line of our great Virginia network, and which the board feels especially constrained to press earnestly upon the attention of the legislature, is an extension of the Manassa's gap railroad, from its present western terminus at Strasburg, to a point upon the Baltimore and Ohio railroad, equi-distant between Baltimore and Parkersburg, and about seventy-five miles west of Strasburg. This road would place Alexandria in direct communication with the Ohio river at Parkersburg, and thence with Cincinnati and the whole Ohio system of railways. In connection with this work a road twenty-five miles in length, from Fredericksburg to the nearest point of the Orange and Alexandria railroad, would make a continuous line between Parkersburg and Petersburg, passing through or near all the principal cities of the state except Norfolk, and capable of being continued jointly with the Southside road to that city from Petersburg, over a route which has recently been found by survey to be only about eighty miles in length and to be almost level throughout its distance. By the route in question the distance between Alexandria and Parkersburg is about 367 miles, all of which is provided for but the portion of seventy-five miles between Strasburg and the point upon the Baltimore and Ohio railroad, already described, called Paddytown.

As little or no doubt can exist that the road from Paddytown to Parkersburg *will be ready for use on the 1st January 1855, no time*

should be lost in securing to Winchester, Alexandria, Fredericksburg, Richmond, Petersburg and Norfolk the full benefit of a connection with the same point on the Ohio; and it is hazarding but little to say that the united efforts of those towns will be able to attract through our own state as much of the great trade of the West passing over this route as Baltimore will bring within her control from the same source. The connection of our railroad system with the Baltimore and Ohio railroad in the manner proposed, derives a great local importance from the fact that the largest beds of the best bituminous coal which can be found anywhere on the Atlantic slope immediately surround the proposed point of junction on the Baltimore and Ohio railroad. The proposed connection would open a direct railroad transit for this immensely valuable article across the northeastern portion of Virginia to Alexandria, a city which is rapidly becoming one of the largest shippers of coal in the Union. From facts within the knowledge of this board, it does not hesitate to state that a subscription by the commonwealth of two-fifths of the means necessary to the construction of this connection, as well as of that from Fredericksburg to the Orange and Alexandria road, will be promptly met by the requisite private subscriptions, and that the enterprise can at once be set in progress. This great connection deserves and ought to command the pecuniary aid of the legislature.

Such is the system of railways progressing in our state. With one branch reaching into that rich tobacco and grain growing region of country lying in Southern Virginia and in western North and South Carolina at the eastern foot of the Blue Ridge, upon the head waters of the numerous streams that rise thence and flow into the Atlantic; with another branch reaching far out through the southwestern portion of our own state, across the entire length of Tennessee, into the heart of the chief cotton producing country in the world, and tapping the Mississippi river at a point where pass \$225,000,000 of wealth per annum; with another branch reaching over the entire width of our state into the valley of the Ohio to the central emporium of its commerce, and touching the Ohio river at a point which enables it to compete successfully for the trade of that entire valley with all rival works at every season of the year, and to monopolize the trade of several of those works during a considerable portion of the year; with still another great arm reaching through our northwestern coal beds into this same great valley at a more northern point, nearer to the lakes and nearer to the centre of that prolific region of country lying between those lakes and the Ohio river—a region of country which is entirely covered over with canals and railways—with all these improvements uniting themselves to our eastern longitudinal line of railroads which traverses the whole length of the state parallel with the Atlantic, and converging by its means upon the most capacious harbor in the world, where also converge the navigated waters of five entire states—it is improbable that Virginia shall fail to become in a short period the first commercial state of the Union, or fail of securing her proper share of the great trade of the West, or be disappointed in the *expectation that her system of works will produce large revenues to her treasury and immense wealth and prosperity to her people.*

These great railways of the state, forming, as shewn, a consistent system, cannot be regarded as rival enterprises. In Massachusetts, where railroads are distant from each other an average space of only seven miles, and which are for the most part strictly local in character, no rivalry exists between them. If experience proves that such works as these do not conflict, how much less possible are conflicts between our own works, which penetrate each a great distinct section of the state, at distances of fifty and a hundred miles apart, which are not only secure in the monopoly of the trade of the immediate localities through which they pass, but inevitably certain to share largely in that immense trade of the West, which multiplies in geometrical proportion with the means of transportation afforded to it?

The trade of the Virginia network of railroads will be of two kinds, namely: that obtained within the state, and that obtained beyond its limits.

Their *local* trade is not at all to be computed by the amount now produced in the state. There is no limit to the surplus products of a country like ours but in the means of transportation. Where there are no means of transportation there is no trade. Trade springs up at the approach of a railroad. Energies which seem dormant in a community receive life at the very instant this mighty stimulus of production is applied. Give but a market to the industry of our enterprising people, and they at once become producers to an extent which they themselves had never imagined. In the native elements of national greatness Virginia is without a rival amongst the states of the Union. Fortunately situated in her geographical position, she embraces a soil which produces in perfection all the fruits and grains of the temperate zone, whilst her climate is probably unequalled, certainly unsurpassed, for salubrity by that of any country of like extent in the world.

Water power, in other countries regarded as one of the greatest elements of wealth, has heretofore in Virginia attracted but little attention, and yet she possesses an extent of it almost without limit. It is hazarding nothing to say there is water power enough in Virginia to manufacture for all Europe and America. The great Appalachian chain of mountains passes across the state from northeast to southwest, occupying a distance of about thirty-five miles from its eastern to its western base. The great rivers of the Ohio and Potomac are chiefly supplied by tributaries rising in these mountains within our borders. The Roanoke and the Holston issue from the same chain and course a considerable distance in our state. The Great Kanawha passes through the whole breadth of this mountain belt, from south to north, for hundreds of miles across our western territory, affording in its rapid course unlimited water power. Coursing from far south, its water is warmer and less liable to freeze than that of any river in the same latitude, and is admirably adapted in that respect to manufacturing in the winter time. The James river traverses more than half the width of the state from west to east. The feeders of all these streams are mountain torrents, supplied by never failing springs and varying but little *in volume* during the course of the year. Upon

many of these waters other elements of wealth are abundantly encountered, besides their countless water falls. Minerals of almost every description abound, but probably none so much as iron and coal—those heavy articles, which, when means of intercommunication are perfect, attract manufactories to their sites. Our iron is already proverbial for its excellence, although it is well known that our best mines have not yet been operated. Our strata of coal are found in thicknesses varying from two to thirty feet, and deposits of the species known as *cannel* coal are found by recent discoveries to be not only of the most superior quality, but in quantities utterly inexhaustible. Indeed our coal measures cover the larger portion of the state. The salt mines of the Kanawha and Holston valleys are capable of being enlarged in productiveness to any extent, whilst the gypsum beds upon the latter stream are probably equal in quality and extent to any that are known to commerce. The soil where these minerals abound, unlike that of other mineral regions, is highly fertile, and capable of supporting a heavy population.

These are some of the natural resources of our commonwealth, promising an extraordinary increase of wealth as the result of completing her great public works, and ensuring an immense local trade to those works when completed. But it must also be considered that her unrivalled water privileges, her excellent climate and admirable geographical position on the continent, must inevitably render her, when the railroad system shall pervade the whole Union, the chief manufacturing state of the confederacy. It is found, by recent scientific experiments, that wool grown in Virginia is superior in fineness and strength of texture to any other whatever. In regard to this article and cotton, it is found that the climate of northern latitudes is too severe and the atmosphere too highly charged with electricity for the easy manufacture of textile fabrics, while the climate of southern latitudes is too enervating for continuous labor in mills and workshops. In proportion as the system of internal intercommunication shall be perfected in the Union, will be the tendency of the manufactories of these fabrics to concentrate in our latitude and territory. By the inevitable laws of public economy, every railroad and canal that is opened in the Union will but facilitate and increase this tendency. The higher latitudes of our country will devote themselves more and more to the cultivation of cereals, the lower latitudes to that of sugar and fibrous staples, while our central districts, in which our great national highways meet, will employ themselves chiefly in combining the rude staples of each extreme region into finer fabrics by means of their coals, minerals and water power. To consummate these results for Virginia the whole railway capital of the Union is conspiring. To hasten and secure them for herself, Virginia has but to perfect her own system of public works; that is to say, has but to open her doors to the wealth that is pressing for admission. Before leaving this branch of the subject, and as germane to the matter immediately in hand, it is proper to urge briefly here the great importance of a direct ocean steam communication from the ports of Virginia to Europe, not only as a means of perfecting our commercial system, and thereby securing our political independence, but as a means of



supplying that primary want of Virginia, *immigration*. The wealth derivable from this source, in rude labor and cash capital, great and desirable as it is, is not so much to be invited as mechanical and manufacturing skill. Virginia needs the handicraftsman far more than she needs capital, much as she requires the latter. The artificer's labor produces and attracts capital. Capital oftener expels than attracts him. The peculiar adaptations of our state urge us to invite by every means in our power, from the Manchesters and Birminghams of Great Britain and the continent, those artificers who are daily turned out by hundreds without food or employment from their factories. With our railroad system completed, this valuable class of people will find in manufacturing Virginia unceasing employment and food inexhaustible.

It is needless to enlarge further upon the capacities of Virginia for furnishing a *local* trade to her system of railroads. Turning, therefore, to the trade which these works will derive from beyond her limits, it is to be observed that they reach into that portion of the Mississippi valley lying between the latitudes of extreme southern Tennessee and northern Ohio, which is far the most productive portion of that immense basin, and that they will afford to its products the shortest and easiest transit to the ocean of all other routes North or South.

The natural outlets to this basin are the St. Lawrence and Mississippi rivers, midway between the mouths of which lie Virginia and the Chesapeake bay. It is not to be doubted that if there were a natural channel of navigation flowing from this valley across Virginia into the Chesapeake bay, the great bulk of Western trade would be borne upon its bosom rather than upon the Mississippi and St. Lawrence rivers. But these two natural channels do not answer the great demands of Western commerce. Artificial lines of transportation have become necessary to its accommodation. Yet the artificial highways of Virginia will possess the same advantages over all other such works of art in transporting this commerce that a natural channel across her territory, if there were one, would possess over the great natural Northern and Southern outlets to the ocean. The fact is obvious, and requires no amplification or proof.

But it is needless to enquire into the capacity of the public works of Virginia to compete with others for a trade which, if not already, will speedily be, so vast as to stifle competition. If there be competition at all in respect to the overflowing commerce of the West, it will be between accumulating products struggling for transit and not between lines of transportation contending for trade. Already is this the case with the canals and railways of New York. The only limit to trade issuing from the West, now that population is becoming more generally diffused over its territory, will be in the facilities of that trade for reaching market. Capable of producing immeasurably beyond its own consumption, every addition to its facilities for transportation will only multiply its surplus production. Population was its first great want. That being partially secured, its future never ending want will be ACCESS TO MARKET.

Statistics of Western trade have been so often, in so many forms,

and from so many sources laid before the public, that to exhibit them here would be useless repetition. They but teach the great fact of that country's unlimited capacity, when fully populated, for the production of human food and mineral treasure. This immense capacity for production has caused an increase of population such as the world never witnessed before; and, reciprocally, this astonishing increase of population has multiplied its material wealth with a rapidity and in a ratio outstripping all previous computation. The country is yet in extreme infancy. Its matured energies are not yet begun to be exerted. Its complete resources are scarcely beginning to be developed. The combined reciprocal action of its population upon wealth, and its wealth upon population, have scarcely yet commenced to exhibit their stupendous results.

A very few facts will suffice to shew the increase of Western population and wealth. In 1836 the commerce of the lakes was computed to be \$16,461,274 in value. In 1843 that value had become \$89,538,726. In 1848 it was \$186,484,905; and it is now more than \$200,000,000.

The area of the Mississippi valley is 1,500,000 square miles. If populated as densely as New England, it would hold 60,000,000 of people. If populated like England, it would contain 345,000,000 of souls—nearly equivalent to one-half the present population of the globe. Less than seventy-five years ago it contained but 20,000 people, besides aborigines; now it contains more than 11,000,000 of civilized inhabitants. It can support a denser population than any country of like extent in the world. It is attracting emigration by hundreds of thousands every year. With a population generally in the prime of life, surrounded by none of the circumstances which usually check the increase of the species, continuously replenished by additions aside from its natural increase, and enjoying political institutions tending to develop human energy to its ultimate capacity, it would be difficult to calculate the numerical progress of this valley. It is certainly safe to say that the end of this century will find it containing not far less than 75,000,000 of souls.

What will be the amount and value of the trade produced by a people increasing rapidly from eleven to seventy-five millions in number, and what the results of their labor upon a soil teeming everywhere with vegetation and abounding everywhere in minerals, would surpass the efforts of the human mind accurately to compute. It would seem that the mere mention of the foregoing leading facts would suffice to banish all apprehensions that might be felt of a deficiency of western trade to afford occupation for the numerous public works projected for its transportation.

The annual loss by accidents on the Mississippi river to the commerce transported upon it, was computed in 1840 to be upwards of \$3,000,000. The value of that trade in that year was \$220,000,000. The loss upon trade pursuing this channel was therefore one and a quarter per cent. This is one item of the cost of Mississippi transportation. The statistics of Western trade exhibit the fact that all the articles of Western grown food, except the products of the hog, are *exported in larger quantities* eastward towards the Atlantic, than south-

ward down the Mississippi river. The fact is owing to the injury sustained by cereal products in their passage through the warmer climates of the lower Mississippi and the Gulf. These cereal products, especially Indian corn, are too cheap to bear a high cost of transportation, and invariably seek the cheapest transit to market. This important disideratum will be possessed by our own improvements. Scientific surveys shew that the grades upon our railroads will be considerably less than those of the roads north of them; and whether Cincinnati, Louisville, St Louis, Springfield, Memphis or Independence be taken as the centre of the Mississippi valley, the transit thence over Virginia to Hampton Roads is by many miles the shortest of all the approaches from the West to the Atlantic. The capacity of that valley for furnishing exports of cereals may be inferred from the productions of Ohio in 1850. In that year the wheat crop of that state was estimated to be 30,000,000 of bushels, of which she consumed but about 12,000,000. Her production of Indian corn in the same season was 64,000,000, of which she fed to her stock 42,000,000, exported 2,000,000 in bulk, and fed to fat animals, which were driven to market, 20,000,000. So, therefore, but for the cost of transportation, Ohio alone would have exported in that year 40,000,000 bushels of wheat and Indian corn. The statistics of the New York and Ohio canals exhibit the fact that but a very inconsiderable portion of Indian corn is sent to market from a distance greater than the eastern shores of lake Erie—a fact which demonstrates that our Virginia lines of transportation and our Chesapeake ports will monopolize the Indian corn trade of the Ohio valley.

The subject of our great railroads has been dwelt upon at some length, in order to disabuse the public mind in Virginia of a prevailing prejudice, induced by the want of due reflection, that the public works of the state are antagonists and rivals, and in order if possible to put an end to the mutual hostilities which unfortunately prevail between their respective friends. Nothing is wanting to the rapid prosperity of the commonwealth but harmony and concert of action among these great interests. Conflicts between them only result in retarding their progress, and exhausting the means of the state upon works of secondary consequence. It is vitally important that the resources of the treasury should be concentrated upon our leading enterprizes and applied with systematic economy, but enlightened liberality, to completing the great system of improvements in which the state is engaged. The completion of these, instead of finding them competing with each other for trade, will only find them laying down additional tracks and engaged in augmented efforts to accommodate the accumulating commerce pressing upon them for transit.

It is the good fortune of the board to be able to announce, that notwithstanding the embarrassment prevailing in the monetary affairs of the country, the bonds of the state are selling for higher premiums than they have ever before commanded. While this is so of the present time, the finances of the state have but just emerged from a critical crisis. The difficulties which presented themselves to the board during the year can scarcely be understood by those not fa-



miliar with the duties imposed upon them by the laws. The appropriations of the last three years to works of internal improvement, have far exceeded what was ever before known in the history of the commonwealth. So considerable and sudden was the increase of the public debt, that serious apprehensions for the public credit began to be entertained by discreet and reflecting men. The engagements into which the state had already solemnly entered amounted to an immense sum of money—much beyond what had ever been realized before in one year from the sale of state bonds—the only mode provided by law for procuring funds to defray the costs of public works, whether constructed by joint stock companies or wholly upon state account. The commonwealth, by various enactments, *directed* the Board of public works to subscribe to a great number of joint stock companies whenever the amount subscribed by private individuals should reach a specified sum.

When these subscriptions were made, it became the duty of the board to *pay* the state subscriptions *pari passu* with the payments by private stockholders. There were no conditions annexed whereby the duty thus imposed could be either deferred or avoided by the board—the mandate was absolute. To fail in the payment of the state's quota from any cause whatever, would have been an act of palpable repudiation. A failure to discharge the interest annually accruing upon the state debt could not have been a more complete forfeiture of state credit, or inflicted a deeper stain upon her honor. The responsibility imposed upon the board was, under these circumstances, of most momentous importance. Not only the honor and credit of the commonwealth—so dear to every Virginian—were committed to their charge, but the prosecution of every public work in the state rested upon their meeting promptly the extraordinary demands upon them for money. The trammels thrown around the action of the board by law were so great, that small discretion was allowed them, even in case of the most pressing emergency. If the state credit had been sacrificed and repudiation had threatened, the board possessed no power to sell state bonds for one cent less than par, if thereby both could have been averted.

To remedy this embarrassment, the legislature at its last session, pursuing the suggestion of the governor of the state, had passed a bill authorizing a change in the form of the state bonds from that previously in use, which deprived them of market value out of the state on account of the trammels and restraints attending their transfer, substituting the coupon bond. The law authorized the board to contract for the payment of interest accruing upon them at any place beyond the limits of the state—a discretion not before allowed. The law fully answered the end for which it was proposed. The result has shewn that but for its passage nothing but an extra session of the legislature could have saved the state from repudiation. The change in the financial policy of the commonwealth, effected by this law, and the negotiations it enabled the board to make, have entirely diverted the apprehended danger, and permanently advanced the stocks of the state to prices above their par value.

The Board of public works felt most deeply the responsibilities resting upon them, and were none the less anxious upon the subject because the position had been assigned them without any agency of their own. Sales of the old state stock were limited in a great measure to our own citizens, and nothing, consequently, but the surplus capital seeking investment in Virginia was used in their purchase. The amount of their sales seldom reached above \$800,000 per annum; and as there was no market value for the bonds beyond the limits of the state, it was quite impossible to force them upon the market at their par value, while they could not be sold for a less price under express provision of law. The demands for money to meet the augmented liabilities of the commonwealth, under the liberal appropriations of the legislature, far exceeded these sales, and the board saw distinctly the utter impossibility of increasing those sales by any means whatever then at their command. Since the 1st of July last they have been upwards of \$2,000,000, all of which has been raised by the sales of coupon bonds, except a trifling amount raised upon the old bonds.

In order that the legislature may fully understand the critical condition from which the negotiations of the board have rescued the state, it may now be stated that in July last, before the new bonds could be prepared, there were drafts upon its table for immediate payment amounting to four hundred thousand dollars—to liquidate which there was not a dollar in the treasury. Previously to this state of affairs, namely, in the beginning of April, the board, upon consultation amongst themselves, concluded that the indications of the commercial world portended an approaching financial pressure. This conviction rendered them doubly anxious to secure, at as early a date as possible, whilst money was yet abundant, all the means requisite for public purposes during the year. The result has shewn the correctness of these suppositions, and that their promptness was fortunate even beyond what they themselves anticipated. The pressure now prevailing has occasioned considerable embarrassment in the commercial affairs of the country. It has imposed upon the banks the necessity both of refusing to a great extent discounts upon paper offered at their counters, and of curtailing their discounts already granted, more rapidly than is customary. In the midst of this financial embarrassment came large demands upon the treasury for the liquidation of interest upon our state debt. The law had set aside no specific sum of money for this purpose, but made it simply a charge upon the treasury. The moneys in the treasury were insufficient to pay off the interest, and other means were to be resorted to. In case of any temporary want of money, the law directed the treasurer, with the sanction of the governor, to borrow for a short time, from the banks, such means as were necessary for the absolute purposes of government. But such was the pressure, that the banks found it extremely inconvenient to advance even comparatively small sums, and would have been compelled either to refuse the state the very large sums she required, or else to have granted the accommodation at the ruin perhaps of many of the thrifty and deserving business men of the community. The

arrangements hereafter stated, which were entered into by the board, enabled them to pay the interest upon the state debt, and thus to relieve the banks from the necessity of a demand upon them, which it would have been hurtful to the state to refuse and disastrous to their customers to grant. The negotiation which was made by the board placed the state stocks at once above par, and has ever since furnished a full supply of funds to meet all the demands upon them.

In their negotiations of the coupon bonds the board have been fortunate in procuring the services of a banking house in Washington city as their agent. Some of the members of the firm of SELDEN, WITHERS & Co. were known to the board; and whilst they were capitalists of undoubted means, the long experience of the principal partner, Mr. Selden, in the finances of the country, as treasurer of the United States, together with his lofty character for honor and integrity, seemed to indicate that a better selection could not be made. The energy, activity and efficiency with which the agency have conducted the negotiation, have fully repaid the confidence of the board.

The board determined to make the interest upon the coupon bonds payable in New York, considering, from all the information they could obtain, that this was indispensable to giving them full currency in the markets beyond our own borders. Our stocks have now, for the first time within our history, a market value permanently above par beyond the limits of the commonwealth. This is attributable to the fact that the bonds are conformed to the views of commercial men, by being readily transferable from one holder to another, thus constituting a commodity in all markets where money is seeking safe investment. It has turned public attention abroad to Virginia, her means and her resources. And it is now beginning to be understood beyond our limits, what we have always known at home, that this commonwealth deserves as high a credit as any state in the Union.

The inducement to the adoption of the coupon form of bond was the want of a sufficient *home* demand to absorb the large issues of state stocks required for the prosecution of our public works. Coupon bonds meet the requirements of foreign purchasers in a manner in which those of the old form entirely fail to do, and the adoption of that form by the state has greatly extended the sales of her stocks in markets beyond her limits. Prudence and sound economy, however, forbid the creation of too large a foreign debt by this or any other means. The interest annually payable upon such a debt is a yearly *cash* balance against our commerce, and its amount should be kept down by every means within our power. The coupon form of bond ought to be adhered to, as enlarging the market for our stocks, and as the only adequate means of maintaining their prices at the highest standard; but, at the same time, proper measures ought not to be omitted to enlarge, as much as possible, the *home* demand for these securities. This is doubly important, because, unless the *home* demand be supported and maintained, the demand abroad cannot long continue firm and healthy.

The board are decidedly of opinion that the most certain and effectual means of accomplishing this object; that is to say, of reviving

and strengthening the demand *within* the commonwealth for her bonds, is to require the circulation of her banks to be based upon these stocks. The furnishing of currency to the community is one of the functions of political sovereignty, and is a prerogative which belongs to government alone. This prerogative is usually in our country delegated to banks, government imposing such conditions upon the exercise of the privilege as the public safety and interests require. In Virginia, one of the conditions of this privilege is the payment by the banks of a semi-annual *bonus* of one-fourth per cent. of their capital stock into the public treasury. In Massachusetts, where the capital employed in banking is nearly four times as great as that of Virginia, the bonus charged is one per cent. per annum, and produces a revenue to the treasury of nearly half a million of dollars. In many of the states of the Union, New York and Massachusetts for example, the further condition imposed upon banking institutions, for the privilege of exercising the sovereign function in question, is to require that notes of circulation shall not be issued unless public stocks to an equal amount be deposited with the treasurer of the state as security for their redemption, that officer being also required to countersign such notes as a certificate of such deposit. Bank notes are thus invested, not only with the credit of the banking corporations by which they are issued, but also of the states whose bonds are pledged to secure them. Along with the responsibility of the bank itself, they bear the *imprimatur* of the state.

Requiring the circulation of the banks of this state to be based upon her stocks would not only add a new element to the security of that circulation as a currency, but would create a home demand for her bonds equivalent to the amount of her banking circulation—a demand which would be fully commensurate with any future exigencies of the treasury resulting from appropriations for public works.

To render this measure thoroughly efficient, sound policy would seem to require that no further special charters for banking purposes be granted—that in lieu thereof a general law be enacted prescribing the conditions and incidents of exercising the banking franchise, and authorizing *all* associations whatever, that might be disposed to encounter those incidents, upon complying with those conditions, *ipso facto* to become banking corporations. Among these incidents and conditions, the more essential are the following: Stockholders to be individually liable for the obligations of the banks to the extent of their shares. The capital stock of any bank to be not more than one million nor less than one hundred thousand dollars. The number of stockholders of a bank to be not less than fifty. Banking circulation to be based dollar for dollar, upon state stocks, and to be countersigned by a state officer. Banks to redeem their circulation at par in specie, not only at their respective counters, but also at such commercial central points in the state as should be designated by law, respectively, for the banks of each section of the state. These, with such regulations as are already prescribed by law, would provide sure and indispensable safeguards against abuses of the banking privilege by over

issues, over banking, or other fraudulent practices. It is only the abuse of the banking franchise that renders these institutions public scourges. When government provides against such abuse by all means within the compass of law, it does its whole duty upon the subject. Having done this, it should abstain from doing too much. It should leave the business of banking to the operation of the general laws of trade. It should leave it *free* for all to pursue, and not confine it to a few specially chartered corporations. It should allow competition to exert the same healthful influence in this branch of business as it exerts in all others. It should refrain from confining the business to a few favored corporations, thereby creating a monopoly of money dealing and currency making, more baneful and disastrous to society than all other species of monopoly.

**FREE BANKING**, under the restraints just adverted to, devised to protect the public against the disasters of careless and *irresponsible banking*, would allow the business to be pursued wherever in the state money could be advantageously employed at legal interest, and would greatly diminish the lending of money at usurious rates. Under this system, in localities requiring little banking capital, banking would be conducted upon a limited scale, and at limited expense. In localities requiring large capital, the business would be conducted on a scale commensurate with the larger necessities of the community. The business of banking would accommodate itself to the exigencies of the community everywhere in the state—would increase with an increased demand for capital, and decrease with a diminished demand.

Each bank would be independent of the control of all others, while its affairs would be subjected to the ever vigilant scrutiny of the community immediately interested in their proper administration. Requiring the number of shareholders in each case to be at least fifty, would prevent the secret and often reckless operations of private banking. Restricting the capital of each institution to one million of dollars, would prevent those large moneyed combinations so often formed for the aggrandizement of capital at the expense of labor. Subject to such limitation, capital, under this system, would combine wherever in the state, and in whatever amounts the circumstances of trade would require, without the expense, delay and uncertainty attendant upon applications to the legislature for special acts of incorporation. Banking capital, springing into existence in larger or smaller amounts, in every locality in which a demand existed, would increase rapidly in aggregate amount in the state; would give new impetus to her agricultural, mechanical and manufacturing interests; would create a continual demand for her bonds, and would prove a productive source of taxation from which to provide a part of the sinking fund required to be created simultaneously with appropriation under the new constitution.

The present is a peculiarly propitious time for the adoption of the free banking system. The charters of the existing banks are soon to expire; and the legislature will probably be called upon at its coming session to decide whether they shall be renewed. A renewal of their charters, with their present overshadowing capital and numerous



branches, located in every portion of the state, enabling them to exert a powerful control over its moneyed capital, would probably defeat the organization of an independent system, and perpetuate for a long time to come the restrictive system now in operation.

Free banking, with its circulation based upon public securities, is commended by the successful experience of many of the states of the Union, and especially of N. York, ever foremost in efforts to strengthen her finances, to promote her material and substantial wealth, and to grasp the control of the capital of the Union.

In view of the vital importance at this time of extending every financial aid in the power of legislation to the railroad companies of the state endeavoring to complete their works, it would be advisable to allow the bonds of these companies also to be received in pledge for the redemption of banking circulation, provided the Board of public works shall certify the companies issuing such bonds to be solvent, to have completed the subscriptions of their entire capital stock, and to have collected the full amount of their stock subscribed; and provided also that such bonds be secured upon their property by mortgages having precedence of all other incumbrances, and be issued for the purpose of constructing, completing or adding to their works. This measure would give to the bonds of these companies the currency and sale which has heretofore been given them by the state's guarantee, now no longer constitutional. While facilitating the completion and perfection of their works, it would add greatly to the general prosperity of the commonwealth.

The condition in which the western portion of the Southwestern turnpike road has been placed by the action of the legislature, not only during its last session, but likewise at the session of 1848-'49, has been very embarrassing to the board, and requires a statement somewhat more detailed than is usual.

The work is completed from Buchanan to Wythe courthouse, a distance of 100 miles, but the work on much of this distance has been imperfectly and badly executed. This will require a greater expense for some years to keep the road in proper repair, and whilst the injury to the public is somewhat temporary it is nevertheless to be deeply regretted.

At the session of 1848-'49 this road was the subject of very close and scrutinizing investigation by the legislature, the avowed object of a large party being to put a stop to the further prosecution of the work. In reply to a resolution of the senate, the board then made a report of their proceedings, which satisfied all enquiry and stopped the farther agitation of the subject. The sense of the legislature, however, seemed to be decidedly in favor of carrying on the work under the then existing circumstances. But a resolution was passed with great unanimity by that body, directing the Board of public works to discontinue the road, whenever it could be done without the violation of a contract already entered into with a contractor, for the whole unfinished portion of the road. Thus the matter stood in the spring of 1849: a very large force was then put upon the work, which, however, did not progress with satisfactory rapidity. During the autumn,

or rather in the following winter, the board finding the contractor unable to complete his contract within the specified time, consented to prolong the period of its completion for one year, upon assurances that every effort would be made to prosecute vigorously the work.

The season which succeeded this extension of time turned out to be one of excessive wetness and rain, and one of great scarcity in the Southwest, as the board has been informed. It has, indeed, been alleged that it was impossible to procure supplies to maintain a large force upon the work, and little progress was made during that year.

During the last session of the legislature a set of resolutions were passed which stopped the contractor forthwith from all further work upon a section of the road embracing twenty miles, between Wythe and Smyth courthouses, and which contained other provisions that necessarily delayed the prosecution of the work for three months during the spring and summer. So soon as the directions of the legislature could be complied with the twenty mile section was put again under contract, and is now making satisfactory progress.

The section of the road extending from Smyth courthouse to the Tennessee line the board have consented to be transferred by the contractor to a subcontractor, but with restrictions which the attorney general thought the resolutions required, and which restrictions will probably prevent the immediate prosecution of the works.

The board could certainly have forfeited the contract altogether; but there was then no doubt whatever that this course would have resulted in stopping the work altogether at a point some short distance beyond Smyth courthouse, for there is now only money enough appropriated to take the road to the point indicated. This the board did not feel at liberty to do, when the legislature had, in 1849, indicated so decided a desire for the completion of the road, and when that body was so shortly to convene again. It is true the resolutions direct the letting of the road in five mile sections, but this of course meant, *as far as there was money to pay for it*. Indeed, if they had meant anything else, contracts could not have been let at the low limit fixed by the resolutions, when there was no money appropriated for their payment. The contract with the original contractor had been recognized by the legislature, and there was, as the board conceived, an implied undertaking on the part of that body to pay for the work when completed under that contract.

The resolutions from first to last have trammelled the course of the board in their management of this work, and they now refer the whole matter to the legislature, with the sincere hope that their action may be so clear and distinct that all doubt may be removed as to what the legislature wishes to be done by the board. If the work is to be prosecuted, then it will require either that the resolutions of the last session be repealed or that an appropriation of money sufficient to carry them out be made by law.

The report of the engineer in charge of the Blue Ridge railroad, Col. C. Crozet, will give detailed information of the progress made in this great undertaking within the last twelve months. The board cannot dismiss this subject without bearing a willing testimony to the zeal, in-

dustry and consummate ability of the engineer in his conduct of this work. It has been inspected by the board at different times within the year, and they have been pleased to see how the obstacles, presented by deep mountain ravines and precipitous spurs, have yielded with apparent ease, and at a comparatively small cost, to the skill and genius of the accomplished engineer. The corps under his charge, composed entirely of young Virginians, deserve approbation for their merit and industry. This work is carried on under the exclusive control of the Board of public works, and it is hazarding little to say, it will compare favorably with any work in the commonwealth for durability in its structure, despatch in its execution, and economy in its prosecution.

The board would respectfully but earnestly call the attention of the general assembly to an early and favorable consideration of that part of the engineer's report respecting the increased amount of means absolutely necessary for the vigorous and successful prosecution of this work during the present year. By the third and fourth sections of the act incorporating the Blue Ridge railroad company, the board are, in express terms, prohibited contracting to pay, or paying "in any one year, more than one hundred thousand dollars." The state of the work previous to this time has been such that this limitation has thrown no embarrassments around the operations of the company; but now, from the forwardness of the work, the force engaged, and the removal of obstacles heretofore existing, the board are satisfied that unless this restriction is removed, the advancement of this great improvement will be retarded, the cost of construction largely increased, and the public interests in other respects considerably prejudiced. The exact amount of the expenditures for the present year the board have not the means of ascertaining; but as they are assured by their engineer, that one item alone—the payment of the 20 per cent. reservation upon the various contracts—will exceed \$100,000, and as another necessary item—the iron rails for the track in connection with the Central railroad on either side of the mountain—will hardly fall short of \$50,000, and moreover, as they entertain a confident expectation that an unusually large amount of work can be done during the year, they would not greatly miscalculate, if indeed they at all over estimated, the amount necessary to meet the requisition upon the company, were they to set it down at \$300,000. But in the absence of data upon which to base a precise estimate, they would simply recommend a rescission of the limitation referred to, coupled with the necessary authority to the board to meet the payments that may be called for by the estimates and drafts of the engineer. The delegation of this general authority cannot be attended by any injurious consequences, because all the contracts are of such a nature that not a dollar can be paid for this work except upon the estimate and draft of the engineer, whose wise economy and watchful care of the public interests, thus far, give the flattering guarantee that those interests could not well be placed under the guardianship of one more competent or worthy.

The annual report of the president of the James river and Ka-



nawha company will attract the earnest attention of the legislature. It discloses a condition of things which calls for the prompt and efficient action of your body. If provision is to be made for appropriations to pay the accumulating interest upon the debt of that company, sound policy would seem to suggest that it should be done at once. The duties which would devolve upon the Board of public works, in case of a failure by the company to pay the interest upon their guaranteed bonds, would be extremely delicate, and might be disastrous to the company. If this company fail to pay interest upon their bonds guaranteed by the state, it becomes the duty of this board to proceed, under the mortgage given to secure the state for such liability, to sell out the entire property of the company. This course would at once put a stop to the farther prosecution of the enterprise, and would result in a total sacrifice of the stock of the company.

Such a responsibility is much greater than this board would willingly assume, if there was any legitimate mode of avoiding it. They are happy to believe the wisdom of the legislature will devise, and their prudence will carry out such measures as will best promote the interests of this truly great enterprise.

Of the James river and Kanawha canal it is certainly unnecessary for this board to speak at any length. This subject has at different times been elaborated and enforced by many of the ablest men of Virginia.

After dwelling at such length in the foregoing pages upon the importance and magnitude of the four great improvements in progress, or projected from the longitudinal base line already described, the board deem it unnecessary to make any detailed mention of the advances made in the construction of the several roads designated as the Southside, Richmond and Danville, Virginia and Tennessee, and Virginia Central railroads. Suffice it in reference to them, and also to the Orange and Alexandria and the Manassa's gap railroads, to say, that their management appears to have been highly judicious, and that the respective works have been prosecuted with so much energy, skill and judgment as to give to their immediate friends a flattering prospect of the speedy realization of their most enlarged hopes, and to the state by which they have been fostered the best assurance that her patronage has not been misapplied, and tempting inducements to contribute yet more largely of her means towards their rapid completion. At this point of progression in a well directed, practicable and judicious system of internal improvement, cutting out great avenues of trade from East to West, and not only developing the long hidden treasures of our own greatness, but also placing within our reach the combined wealth of some of the most thriving states in the confederacy, it does not become Virginia to stand still or to be indifferent to the movements around her and within her own borders. And though the restrictions by which she has recently consented to be controlled may seem to point to a greatly contracted exercise of the means at her command, a closer inspection will reveal the fact that those very restrictions are simply wise prohibitions of expenditures for schemes of

secondary importance, thereby necessarily producing that concentration of capital and action so essential to the success of enterprises worthy the countenance alike of the citizen and the state. At this moment particularly Virginia cannot be passive. *The people* have, at last, with a spirit unusual to them, and which of itself foreshadows success, firmly and resolutely set their shoulders to the wheel of improvement. Still, some force is necessary to produce that steady onward motion to which there can be no retrograde. The moment, then, is propitious, and Hercules can but promptly step forward and lend that propelling force which will be the final stroke in the accomplishment of designs so magnificent, and the development of results which, when translated as they stand out upon the bright, broad wall of regenerated empire, will startle, not with fear, but with delight—will bring no appalling reminiscences to the mind, but will exhibit a present of unclouded prosperity, upon whose far off circumference can be seen the cheering promise of greater plenty yet to come.

Of the railroads already completed, the board do not deem it important to make any special mention, from the fact that the reports herewith presented speak sufficiently for themselves, and make such a gratifying representation of the condition of their respective works, that the legislature cannot but be satisfied that the agents of those corporations have been faithful to their trusts, and that their capacity is not exceeded by their fidelity. The principal part of these roads forms an important link in what is known as the great chain of travel from the North to the South, and it is therefore a matter of no small consequence to them or to the state that they should be kept in the very best condition and afforded every reasonable facility for presenting to the traveler seeking this great national thoroughfare every inducement for continuing to it his patronage and influence. It is known to the legislature that the Virginia portion of this line is not yet perfected, in consequence of the want of a proper connection between the Petersburg road and the Richmond and Petersburg road at the latter city. For this reason, delays equally annoying to travelers and detrimental to the great mail interests, are necessarily produced, affecting seriously the reputation of the entire line, and encouraging the practical idea of the establishment of a disastrous opposition. There can be but one opinion as to the necessity of speedily applying a salutary corrective, and a diversity of opinion exists only as to the mode in which this shall be done. To form a proper connection would require an expenditure that could ill be borne by either or both of the companies whose roads it is desirable to unite; and even if their finances would justify the expenditure, it is a question which addresses itself to the wisdom and justice of the legislature, whether the whole burden of this important improvement should be permitted to fall upon these two companies, when the immense benefits which must ensue will be shared, like the genial shower, by every portion of the commonwealth through which this line traverses. By reference to the report of the Richmond and Petersburg railroad company, it will be seen that they propose to form this connection on condition that the legislature relieve them from the payment of the dividend bonds due

the state. The board submit the subject to the consideration of the legislature, trusting that its wisdom may devise some plan by which the object so much desired may be speedily accomplished.

In reference to the Seaboard and Roanoke railroad, in which the state has no pecuniary interest, the board have learned, unofficially, that it has been completed as far as Garysburg, North Carolina, within a few miles of its southern terminus—that it is well and substantially constructed and equipped, and that it promises to be not only an accommodation to the public, but also a source of considerable revenue to its proprietors. The board solicited a report from this company, but regret to say that up to this time none has been received.

The condition of the various joint stock turnpike and navigation companies requires no detailed notice or special recommendation by the board. They, therefore, respectfully refer the legislature to the reports of those companies for any particular information which during the session circumstances may call for.

At the last session of the general assembly an appropriation of \$4,500 was made for the extension of the Floyd Courthouse and Hillsville turnpike road eastwardly from Floyd courthouse, so as to connect with the Rockymount turnpike road at the top of the Alleghany mountain, increasing its length  $12\frac{1}{2}$  miles, and making the length of the whole road 41 miles 2,640 feet. By the report of the engineer and superintendent, herewith presented, it will be seen that  $26\frac{3}{4}$  miles have been completed and received, and that the appropriation is insufficient by the sum of \$1,500. This deficiency will doubtless be promptly supplied by the legislature. It appears also, from the same report, that the utility of this road is almost entirely dependent upon the widening and good repair of a section of five miles of the Rockymount turnpike on the eastern slope of the Alleghany mountain; and as it is represented to the board that the means of this company are inadequate either to the immediate improvement of the road or the keeping it in proper repair, and as the company would most probably transfer that section to the state for a reasonable equivalent, the board take the liberty of calling the special attention of the general assembly to the suggestions of their very judicious, talented and industrious superintendent, entirely agreeing with him that “it would be an unfortunate economy that permitted one short section to remain in a condition that must necessarily impair, if not absolutely destroy, except for mere local purposes, a long line of useful and profitable improvement.”

Since the adjournment of the last legislature the board have, in conformity to law and on reasonable terms, let the Huttonsville and Huntersville turnpike road to contract to Col. William Hamilton, the former superintendent of the Staunton and Parkersburg road. They also appointed John Brannon, Esq. superintendent of this road, who, by the terms of the contract, is to be paid for his services by the contractor. At the time that this contract was made, the contractor expressed the opinion that the sum appropriated, \$15,000, was not sufficient to complete the road; but he nevertheless took the contract, with the express stipulation that in the event of a deficiency he was to look

for remuneration to the legislature and not to the board. The prosecution of this work thus far satisfies the board that both the superintendent and contractor have been diligently employed, and gives the assurance that its completion will not be retarded by unnecessary delays and that the style of its execution will be creditable to them and acceptable to the public.

The condition of the Beverly and Fairmont road, and the causes which have led to the delay in the construction of certain bridges on that road, are very succinctly set forth by the superintendent in his report, herewith submitted. The legislature will not fail to notice his call for a further appropriation of \$3,000 "to meet contracts and finish the bridges;" and the board deem it but their duty to recommend a favorable consideration of the same.

The subjects presented in the reports of the superintendents of the Cumberland road, the Logan and Kanawha road, the Richlands and Kentucky line road, and the Tazewell courthouse and Fancy gap road, require no special notice by the board. They therefore submit those documents to the legislature without comment.

The legislature, at its last session, was informed of the total inadequacy of the appropriation by the act of March 20, 1850, for the extension of the Beverly and Fairmont road from Fairmont to the city of Wheeling; but as no subsequent legislation was had, and as the wants of the citizens along the proposed line were clamorous for some improvement, the board felt called upon to take the necessary steps for the economical and profitable application of the limited means under their control. Being petitioned in reference to this subject by four distinguished members of the late reform convention, residents and representatives of that particular section of country, the board, upon the representation and at the request of those gentlemen, determined to apply the appropriation, as far as it would go, to the construction of a road beginning at a point some miles west of Fairmont and terminating at a point several miles east of Wheeling, to which points, from the respective places just named, there were tolerable roads. The country between those intermediate points was represented to be void of roads, and dependent upon horse and foot paths for a communication with either extremity. With such a representation before them, the board could not hesitate to make an endeavor to accommodate the wants of the most needy. They therefore appointed Austin Merrill, Esq. superintendent of the road, and directed him to examine the route to Wheeling and make report at the earliest practicable moment. The result of that examination was such as to confirm the truth of the representations previously made respecting the necessity for an improvement between the intermediate points already designated, whereupon the board authorized the same to be advertised for contract. Bids for the construction of the road advertised have been received, but have not yet been acted on. Unless some further legislation is had upon the subject the board will, in anticipation of the commencement of operations early in the ensuing spring, proceed to examine the bids and make an award of the contracts to those who may be found entitled to them.

To the very satisfactory report of the intelligent and excellent superintendent of the Northwestern road the board have nothing to add. It presents a gratifying array of facts pointing to present and increased prosperity and usefulness.

The report of the superintendent of the Ohio river and Maryland road will attract the attention of the legislature, not merely because of its interesting statements and exhibits, indicating, as they do, a handsome and skillful management, but also, because of the important enunciation, based upon judicious surveys and careful calculations, that for the completion of the whole line of this improvement, a further appropriation of twenty-two thousand dollars is indispensably necessary. The board think it unnecessary to add to the arguments contained in the report by way of demonstrating the propriety of this appropriation. Its necessity must address itself forcibly to the legislature, who will doubtless give to it that wise consideration which it deserves, and agree with the board in the opinion that so valuable an improvement should not be permitted to fail for the want of the comparatively small additional amount required to complete it.

In the month of April last the board appointed Robert H. Kinney, Esq. superintendent of the Staunton and Parkersburg road, and they take some pride in saying that the manner in which the interests of that long and valuable improvement have been guarded and advanced has fully vindicated the wisdom of the appointment. His first annual report is herewith presented, with the conviction that a careful perusal will afford a gratifying illustration of the very prosperous condition of the road as well as the industry and capacity of the superintendent. The reasons for his urgent recommendation of an appropriation for the purpose of building a bridge across Tygart's valley river above Beverly, appear plausible to the board, and, they trust, will not escape the attention or fail to meet the approbation of the legislature.

#### PLANK ROADS.

The board have the pleasure of laying before the general assembly reports from two plank road companies, which, although not of a very flattering character, afford no reasons for a diminished confidence in the utility and practicability of this description of improvement. In Virginia they are but experiments whose every step is attended by doubts on the part of over solicitous friends and complaints from those who desire to witness a failure; but their success, which may now be regarded as inevitable, will be the dawn of a new era in the history of branch and neighborhood improvements, reviving the industry and developing the resources of long neglected portions of our commonwealth, restoring to prosperity the multitude of planters whose very limited means denied them the privilege of seeking a market for the little surplus of their gardens or their fields, and affording to the more extended tiller of the soil a safe, expeditious and cheap transit, with his own conveyance and teams, for the various productions which multiply around him and decay in his barns for the want of the very facilities which these plank roads are so eminently calculated to furnish.



The president of the Boydton and Petersburg plank road company states that only a few miles of that road have been completed, but he is confident in the belief that by the last of the present year the whole road will be finished without any increase of the capital stock.

The president of the Fredericksburg and Valley plank road company states that about six miles of his road have been planked, and that if the winter prove favorable the entire 31 $\frac{1}{2}$  miles will be completed during the ensuing spring.

#### SURVEYS.

The accomplished engineer, Charles B. Shaw, Esq., who has, by appointment of this board, conducted the survey for a railroad from Covington to the Ohio river, has but too recently laid his report before them to enable them to give it that careful examination that would justify an endorsement or a rejection of the views therein expressed of the particular routes which it discusses. They therefore submit it to the legislature with the belief that the science, the experience and the professional ability which have been invoked in its preparation will give to it in the estimation of that body no small degree of consequence, and will command for it a grave consideration commensurate to the magnitude of the subject of which it treats.

In obedience to an act of the last general assembly, the board procured the services of Albert H. Campbell, Esq. as principal engineer, and Henry B. Smyth, Esq. as assistant, for the purpose of surveying a route for a railroad from Norfolk to Petersburg. That survey has been made in a most satisfactory manner, and the report of Mr. Campbell, which is herewith submitted, will surely overcome any objections which may exist as to the practicability of the scheme or the cost of constructing the road. A railroad 80 miles long, uniting two important and thriving cities, which can be located upon almost level ground, with few and unimportant curves, and which can be constructed at a cost not exceeding \$11,000 per mile, certainly presents no ordinary temptations to private enterprise if not to state patronage.

The survey for a canal from Pagan creek to Blackwater river in the county of Isle of Wight, authorized by a resolution of the last legislature, has been made by E. H. Gill, Esq. civil engineer, appointed for that purpose by this board. By reference to his report, it will be found that he estimates the length of the proposed canal at 13 $\frac{1}{2}$  miles, and the aggregate cost, exclusive of land damages, at \$ 300,000.

A survey of "Twelve Pole river in the county of Wayne, from its mouth to the forks above Wayne courthouse, with the view of ascertaining the most practicable mode of improving the navigation thereof," was also directed by the last general assembly. To conduct this survey Colonel Luther Haymond was appointed by the board, and they feel assured that the sensible suggestions contained in his report will not fail to receive that consideration to which they are in every respect entitled.

The only other survey which the board were instructed to have

made was that for "a turnpike road from Franklin in Pendleton county, via Monterey in Highland county, to the Warm springs in Bath county." For the performance of this duty they selected Benjamin Hiner, Esq., whose report and map give evidence of intelligence, neatness and skill.

For the purpose of constructing a bridge across New river in Giles county, the board were, by an act of March 20th, 1851, directed to contract with the owners of Chapman & Snidow's ferry for its purchase. To discharge this duty they were necessarily obliged to employ an agent. They consequently authorized Col. E. G. Harman to enter into negotiations with the proper authorities for the purchase of said ferry. His brief but comprehensive report convinces the board that the idea of a contract with the owners of that ferry should be abandoned. It also contains valuable suggestions relative to "the construction of a bridge at some other point," which those interested in the improvement should not hesitate earnestly to consider.

The board have not made any special mention of the several bridge companies in the state, simply because from their respective reports, herewith presented, no particular notice of those companies was required.

For a detailed view of the financial transactions of the board they respectfully refer to the elaborate statements contained in the second auditor's report.

This report will give some idea, but by no means an adequate one, of the various and multitudinous duties devolving upon the Board of public works. This board has within a year despatched, probably, business as great, both in amount and importance, as any tribunal in the state. They have been much assisted in its despatch by their able and excellent secretary, appointed by authority of the last legislature. The compensation allowed this officer is wholly inadequate to the services he has to perform; it is only equal to that of the most inferior clerkship in any of the departments at Washington. The board recommend earnestly, as an act of justice, to the legislature, an increase of pay to this officer, to such a sum at least as will be a support to his family.

It is the last annual occasion on which this board will ever again address a report to your honorable body. The constitution, which has revolutionized the government in every department, has put an end to their existence after the lapse of a very few months, and it devolves upon the legislature to organize the business, the labors and the duties of those who are to be the successors of the present board.

The board trust they will be excused for offering a very few practical observations upon this subject, so vitally important to the state at large, and for which some experience in all of them, and many years experience in some, have taught the necessity.

The present board, with some obvious objections to its organization, has at the same time some advantages, arising wholly from its organization, which it will be extremely difficult in future boards to supply. Composed, as it is now, of the officers of government, there is no

question connected with the condition of public affairs which cannot be instantly and satisfactorily answered by some one or other member present, as the question may relate more directly to the one or the other department under his control. The pecuniary resources and liabilities of the state, the exact sums to be paid, the time, the purpose, the necessity—all being perfectly familiar to every department, gives this board peculiar advantages in the control of the finances, which have now become a subject of vital importance in state economy. Indeed, more now depends upon the wisdom and sagacity with which the finances of the state are conducted than upon any other question connected with the policy of the commonwealth.

One great excellence of the present board is its permanence. It is actually in session almost every day, and can be so if necessity requires. It is absolutely indispensable to a proper discharge of public duty that the board should be made permanent; but it ought to be allowed to hold its meetings anywhere whilst examining the works which need their supervision. The great defect of the present board is the impossibility of procuring personal knowledge of localities—indispensable very often to the proper decision of important questions of controversy before them. In this the new board will have, if properly organized, vast advantages over the present.

Under the new board liberal provision should be made for an engineer force. Many questions arise in respect to which this peculiar knowledge is indispensable and important to the public interests that it should be promptly and efficiently rendered. This can hardly be done without a corps at the command of the board. This corps could be, when otherwise at leisure, engaged upon the materials for a state map, which is a desideratum yet to be supplied to the commonwealth. There is no correct map of Virginia.

The labors of this board have for the last three years been constant and arduous. The time of the members very fully occupied in the discharge of those duties more particularly pertaining to their immediate offices, has sometimes been overtaxed in the discharge of the business of the Board of public works. The legislature is not aware of the labor this board has performed. A few years ago it dispensed but a few hundred thousand dollars per annum among a few joint stock companies. It now dispenses more than two millions of dollars among more than a hundred companies. Formerly its duties were easily despatched in addition to the other duties of the members of the board. Now its duties seriously embarrass its members in the discharge of their other official labors. A deep sense of the important interests committed to their hands, and an earnest desire to discharge faithfully the duties imposed upon them by law, have stimulated them to action and cheered them in their course. They feel that with more time for labor and reflection they might have served more beneficially the public interests; but whilst they are conscious of their inability to avoid errors, they claim exemption of censure, from a consciousness of having acted according to the best lights which their judgment could set before them. It is the earnest wish of the board that the organization of the new one may result in the promotion of



the great interests of the commonwealth, and a more energetic prosecution of the vital schemes of internal improvement in which she is engaged.

All of which is most respectfully submitted.

**JOHN B. FLOYD,**  
*Pres't B. P. W.*

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### **E R R A T A .**

**Page iv, table, line 5 from bottom, after "railroad," strike out "to Camton."**

**Page iv, table, line 6 from bottom, after "to," strike out "Gaston," and insert "Covington."**

**Page iv, table, line 7 from bottom, after "railroad," insert "to Gaston."**

**Page iv, table, line 15 from bottom, strike out "rap," and insert "gap."**

**Page xiii, line 2 from bottom, strike out "critical," before "crisis," and insert "important."**

## SUBSCRIPTIONS

*made from October 1st, 1850, to December 1st, 1851, by the Board of Public Works, to sundry Works of Internal Improvement.*

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To Berkeley and Hampshire turnpike company.  
Boynton and Petersburg plank road company.  
Brandonville, Kingwood and Evansville road.  
Buchanan and Bedford turnpike company.  
Cedar creek and Opequon turnpike company.  
Charleston and Point Pleasant turnpike company.  
Estillville and Nickelsville turnpike company.  
Estillville turnpike company.  
Fincastle and Covington turnpike company.  
Fairmont and Palatine bridge company.  
Hardy and Winchester turnpike company.  
Front Royal turnpike company.  
Howardsville and Rockfish turnpike company.  
Junction valley turnpike company.  
Leading creek and Buffalo turnpike company.  
Luray and Front Royal turnpike company.  
Loudoun and Berlin turnpike company.  
Logan, Raleigh and Monroe turnpike company.  
Manassa's gap railroad company.  
Millwood and Berryville turnpike company.  
Morgantown bridge company.  
Morgantown and Bridgeport turnpike company.  
Middlebrook and Brownsburg turnpike company.  
New creek and Hardy turnpike company.  
North Frederick turnpike company.  
New Manchester turnpike company.  
Newark turnpike company.  
North river turnpike company.  
Orange and Alexandria railroad company.  
Patterson's creek valley turnpike company.  
Parkersburg and Elizabethtown turnpike company.  
Potomac turnpike company.  
Richmond and Danville railroad company.  
Rockymount turnpike company.  
Red and Blue Sulphur springs turnpike company.  
Rivanna navigation company.  
Rockingham turnpike company.  
Slate river navigation company.  
Sistersville and Salem turnpike company.  
Shinston turnpike company.  
Southside railroad company.  
Thornton's gap turnpike company.  
Warrenton and Rappahaunock turnpike company.  
Virginia and Tennessee railroad company.  
Virginia Central railroad company.



## LIST OF COMPANIES

*Accompanying the Twenty-Sixth Annual Report of the Board of  
Public Works to the General Assembly.*

### TURNPIKE COMPANIES.

Ashby's gap turnpike company, - - -	1
Berryville turnpike company, - - -	4
Blue Ridge turnpike company, - - -	8
Brandonville, Kingwood and Evansville turnpike company, -	21
Buchanan turnpike company, - - -	551
Buchanan and Bedford turnpike company, - - -	23
Charleston and Point Pleasant turnpike company, - - -	25
Clarksburg and Buckhannon turnpike company, - - -	567
Fairfax turnpike company, - - -	27
Fincastle and Blue Ridge turnpike company, - - -	28
Floyd courthouse and Hillsville turnpike road, - - -	609
Front Royal turnpike company, - - -	30
Front Royal and Gaines' crossroads turnpike company, - - -	33
Giles, Fayette and Kanawha turnpike company, - - -	554
Hardy and Winchester turnpike company, - - -	36
Hampshire and Morgan turnpike company, - - -	42
Harrisville turnpike company, - - -	43
Hillsborough and Harper's Ferry turnpike company, - - -	44
Holliday's Cove turnpike company, - - -	45
Howardsville and Rockfish turnpike company, - - -	46
Jackson's river turnpike company, - - -	48
Leesburg turnpike company, - - -	49
Leesburg and Snicker's gap turnpike company, - - -	570
Little river turnpike company, - - -	50
Lynchburg and Salem turnpike company, - - -	53
Martinsburg and Potomac turnpike company, - - -	54
Martinsburg and Winchester turnpike company, - - -	57
Middle turnpike company, - - -	59
Millboro' and Carr's creek turnpike company, - - -	60
Moorfield and Alleghany turnpike company, - - -	61
Morgantown and Bridgport turnpike company, - - -	66
New creek and Hardy turnpike company, - - -	575
Newmarket and Sperryville turnpike company, - - -	68
North branch turnpike company, - - -	69
North Frederick turnpike company, - - -	72



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Holliday's Cove turnpike company, - - -	45
Howardsville and Rockfish turnpike company, - - -	46
Jackson's river turnpike company, - - -	48
Leesburg turnpike company, - - -	49
Leesburg and Snicker's gap turnpike company, - - -	570
Little river turnpike company, - - -	50
Lynchburg and Salem turnpike company, - - -	53
Martinsburg and Potomac turnpike company, - - -	54
Martinsburg and Winchester turnpike company, - - -	57
Middle turnpike company, - - -	59
Millboro' and Carr's creek turnpike company, - - -	60
Moorfield and Alleghany turnpike company, - - -	61
Morgantown and Bridgport turnpike company, - - -	66
New creek and Hardy turnpike company, - - -	575
Newmarket and Sperryville turnpike company, - - -	68
North branch turnpike company, - - -	69
North Frederick turnpike company, - - -	72

Patterson's creek valley turnpike company, -	-	-	555
Pittsylvania and Lynchburg turnpike company, -	-	-	73
Raleigh and Grayson turnpike company, -	-	-	557
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Rockymount turnpike company, -	-	-	76
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Roanoke navigation company,	-	-	-	397
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Huttonsville and Huntersville turnpike,	-	-	-	416
Logan and Kanawha road,	-	-	-	418
Northwestern turnpike road,	-	-	-	419
Ohio river and Maryland turnpike road,	-	-	-	424
Richlands and Kentucky line road,	-	-	-	433
Tazewell courthouse and Richlands road,	-	-	-	433
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Fairmont and Palatine bridge company,	-	-	-	491
North Branch bridge company,	-	-	-	492
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Virginia and Maryland bridge company,	-	-	-	500



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**REPORTS,**  
**RETURNS AND OTHER DOCUMENTS**  
**RELATING TO**  
**JOINT STOCK COMPANIES.**

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**I. TURNPIKE COMPANIES.**

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**ASHBY'S GAP TURNPIKE COMPANY.**

**MIDDLEBURG, LOUDOUN Co.**  
**Oct. 28th, 1851.**

*To the Sec'y Board of Public Works.*

**SIR,**

I send you herewith a report of the condition of the Ashby's gap turnpike company for the thirteen months ending 1st October instant, and a report of the receipts and expenditures of that period.

The late treasurer, W. H. H. Harrison, died in September last, and the board, at their annual meeting on the 18th of this month, appointed me his successor.

The reports are made up from the books and papers of the company which have been placed in my possession; but the funds have not yet been handed over to me, there not being any personal representative of the late treasurer—nor has there been any settlement of the cash account.

The board declared a dividend of one per cent., which, on the stock held by the state, amounts to \$140, for which I send you a check on the Bank of the Valley at Leesburg.

Very respectfully,

**A. ROGERS.**

*Return of the state of the Ashby's Gap Turnpike Company, 1st October 1851.*

Amount of commonwealth's subscription unpaid, nothing.

Amount of individual subscription unpaid, nothing.

Due to company other than on account of stock :

On bond or note,	-	-	*564 47
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On open account,	-	-	*123 78
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Expended in construction of road &c. from commencement,	-	-	133,050 00
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Expended in repairs,	-	-	68,652 65
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Property held by the company, viz :

Bank and other stocks, none.

Negroes, none.

Real estate, none but toll houses.

Dividends declared from commencement,	-	-	35,946 87
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Cash on hand, according to books and papers of company,	-	-	2,883 32
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Capital stock :

Subscribed by Board of public works, 140 shares,	-	-	14,000 00
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Subscribed by individuals, 1,190 $\frac{1}{2}$ shares,	-	-	119,050 00
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Amount of dividends from lotteries and other sources, nothing.

Tolls, rents, &c. from commencement to 1st September 1850,	-	101,749 96	
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Tolls, rents, &c. to 1st October 1851, after deducting collectors' salaries and incidental expenses,	-	2,544 72	
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104,294 68

Debts due by company for money borrowed :

To banks, none.

Due to individuals, not borrowed,	-	-	971 92
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Dividends unpaid,	-	-	490 49
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Sundries to balance account,	-	-	2,414 00
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<u>\$241,221 09</u>	<u>241,221 09</u>
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A. ROGERS, *Treasurer.*

\* It is believed that most of the debts are unavailable.

*Statement of Receipts and Expenditures of the Ashby's Gap Turnpike Company, from 1st September 1850 to 1st October 1851.*

1850.

Sept. 1. Balance of cash on hand as reported,	-	-	641	48
Add receipts during that period, viz:				
From tolls,	-	-	3,142	97
Sale of toll house at Aldie,	-	-	150	00
Debts due company in the year,	-	-	93	07

**CONTRA.**

Disbursements during 13 months, viz:				
On account of repairs and improvements,			205	00
Officers' salaries, viz:				
To treasurer, on account salary,	-	-	84	89
Expenses for collecting tolls—five collectors,	-	-	500	00
Incidental expenses,	-	-	13	25
Debts paid,	-	-	341	12
Balance on hand,	-	-	2,883	26
			<u>\$4,027</u>	<u>52</u>
			<u>4,027</u>	<u>52</u>

Balance as above, - - 2,883 26

Debts due from company:				
To contractor, for repairs,	800	00		
Due H. H. Hamilton, deceased, late treasurer,	137	50		
Dividends unpaid,	490	49		
		<u>1,427</u>	99	
Balance for dividends,		<u>\$1,455</u>	27	

A. ROGERS, *Treasurer.*

## BERRYVILLE TURNPIKE COMPANY.

At a meeting of the directors of the Berryville turnpike company, at Henry Shepherd's tavern, in Berryville, the 30th September 1851 : They beg leave to report to the Board public works, that since the last annual report, the further sum of six hundred and five dollars and twenty-six cents has been expended in stoning the grade through Ash hollow, and the board are progressing with that work as fast as they can command means to do so. There has also been expended within the year five hundred and twenty-two dollars and forty-eight and a half cents, for necessary repairs on the new part of the road ; to accomplish which, and to meet other expenses, (which the annual account will shew,) the board have been compelled to borrow, on the new stock account, the further sum of four hundred and fourteen dollars and twenty-five cents. The whole road is in good traveling condition, but will require during the winter further repairs.

The annual account of the treasurer, which is hereunto annexed, will shew a statement of the affairs of the company for the year ending this day.

A list of the stockholders on this day, with the number of shares standing in each name, is also hereunto annexed. A map of the improvement, the length of the road, number of toll gates, and compensation to gate keepers, have heretofore been furnished.

The board have this day declared a dividend on the old stock, of \$1 10 on each share, which will be paid by the treasurer on and after the 15th October 1851. The board have nothing further to report. Given under our hands this 30th Sept. 1851.

EDW'D J. SMITH, *Pres't.*  
CYRUS McCORMACK,  
JACOB ISLER,  
JOSIAH WM. WARE,  
ISAAC WOOD,

TREADWELL SMITH, *Treasurer.*

*Directors.*

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*Return of the state of the Berryville Turnpike Company for the year ending  
30th Sept. 1851.*

Expended in construction of the work from commencement to this date, -	18,593 75
Expended in repairs from commencement to this date, - - -	2,419 03½
Property now held by the company, one share of road stock, - -	50 00
Paid gate keepers from commencement to this date, - - -	2,355 13

Officers' salaries from commencement to this date,	-	-	-	459	22
Incidental expenses from commencement to this date,	-	-	-	91	61½
Dividends declared from commencement to this date,	-	-	-	2,751	49
Cash on hand, as per statement below,				438	94
Capital stock, \$ 16,700 :					
Subscribed by individuals 208 shares, at \$ 50 each,	-	-	-		10,400 00
Subscribed by the state 126 shares, at \$ 50 each,	-	-	-		6,300 00
Tolls from commencement to this date,					10,381 05
Dividend on stock do. do. do.					8 23
Dividends remaining unpaid,					69 90
				<u>\$ 27,159</u>	<u>18 27,159 18</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report,	-	-	-	-	471	83
Add receipts during the year, viz :						
Tolls,	-	-	-	-	744	65
Dividend on stock,	-	-	-	-	1	25
Total receipts,	-	-	-	-	<u>      </u>	1,217 73
Deduct disbursements during the year, viz :						
For improvements and repairs,	-	-	-	-	212	88
" treasurer's salary	-	-	-	-	25	00
" expenses collecting tolls,	-	-	-	-	132	00
" incidental expenses,	-	-	-	-	9	09
" dividends paid,	-	-	-	-	399	82
Total disbursements,					<u>      </u>	778 79
Balance of money on hand,					<u>\$ 438</u>	<u>94</u>

The board have this day declared a dividend of \$ 1 10 on each share of stock in the above account, for the year ending this day, which will be paid by the treasurer on and after the 15th day of October 1851.

By order of the board of president and directors.

TREADWELL SMITH, *Treasurer.*

*Return of the state of the New Stock Account, for extending the Berryville Turnpike Road from Berryville to Winchester, for the year ending the 30th September 1851.*

Expended in construction of the work from commencement to this date, -	24,740 00	
Expended in repairs from commencement to this date, - - -	1,479 86½	
Paid gate keepers from commencement to this date, - - -	950 00	
Officers' salaries from commencement to this date, - - -	300 00	
Incidental expenses from commencement to this date, - - -	88 74	
Interest paid from commencement to this date, - - -	829 39	
Cash on hand, as per statement below,	204 78	
Capital stock, \$20,000 :		
Subscribed by individuals 240 shares, at \$50 each, - - -		12,000 00
Subscribed by the state 160 shares, at \$50 each,		8,000 00
Tolls from commencement to this date,		5,678 52½
Debts due by the company to the Bank of the Valley, - - -		2,500 00
To Isaac Wood, - - -		414 25
	<u>\$28,592 77½</u>	<u>28,592 77½</u>

*Statement of Receipts and Expenditures during the year.*

Balance of money on hand, per last annual account, - - -	6 29½	
Add receipts during the year, viz :		
Tolls, - - -	1,390 38	
Borrowed from Isaac Wood, -	414 25	
Total receipts,	<u>1,810 92½</u>	
Deduct disbursements during the year, viz :		
For this sum paid for stoning road in Ash hollow, - - -	605 26	
For this sum paid for repairs, -	522 48½	
For incidental expenses, -	10 90	
For interest paid, -	152 50	
Paid gate keepers, -	240 00	
Paid treasurer's salary, -	75 00	
Total disbursements,	<u>1,606 14½</u>	
Balance of money on hand,		<u>\$ 204 78</u>

TREADWELL SMITH, *Treasurer.*



*Return of the state of the Berryville and Charlestown Turnpike Company  
for the year ending 30th September 1851.*

Capital stock, \$35,000 :		
Subscribed by individuals 560 shares, at \$25 per share, - - -		14,000 00
Subscribed by the state 840 shares, at \$25 per share, - - -		21,000 00
Tolls from commencement, Aug. 25th 1851, to date, - - -		85 50
Commonwealth's subscription unpaid,	4,724 85	
Individual subscription unpaid, -	2,540 55	
Company's purchase of stock at public sale unpaid, - - -	136 10	
Expended for construction from com- mencement, 1848, - - -	21,641 86	
Expended for timbers, - - -	199 00	
Paid to surveyors and superintendents,	974 78	
Paid lawyers' bills, fee bills, bills of board at tavern, filling quarries, (stone being given,) &c., - - -	288 96	
Amount expended on road-route aban- doned, - - -	250 00	
Amount paid Botts, \$100 ; amount re- turned by former treasurer (claimed as salary \$500,)* - - -	600 00	
Amount expended in land damages, (\$200 for toll house,) -	2,741 33	
Balance on hand Sept. 30th, 1851, per statement below, - - -	988 07	
	<hr/>	<hr/>
	\$35,085 50	35,085 50

*Statement of Receipts and Expenditures within the year.*

Balance on hand Oct. 1st, 1850, -	701 95
Received from individuals, -	3,990 63
Received from Board of public works,	8,325 15
Received from tolls,	85 50

Deduct disbursements during year :	
By amount paid Littlejohn, -	115 00
By amount paid Brown, at \$5 per day,	213 41
By amount paid Botts, treasurer, at \$100 per year, - - -	100 00

\*\$ 300 of this has been sued for.

By amount paid for land damages,	-	772	25	
By amount paid for timber,	-	199	00	
By amount paid to chain carriers,	-	15	25	
By incidental expenses, fee to lawyers, to sheriff, to clerks, and money paid for filling quarry holes,) stone being given,) &c.,	-	241	78	
By amount paid for work on road,	-	10,458	47	
Total disbursements,		-	\$12,115	16
Balance money on hand,		-		\$988 07

President, Howard F. Thornton. Board of directors, Alfred Castleman, Francis McCormack, G. W. Turner—state; Dr. R. S. Blackburn, T. P. Pendleton—individual. Treasurer and clerk, Lawson Botts,—(salary per year \$100.) Superintendent and surveyor, Jas. M. Brown, at \$5 per day when employed.

L. BOTTS, *Sec'y and Treas'r.*

## BLUE RIDGE TURNPIKE COMPANY.

### *Annual Meeting of the Stockholders of the Blue Ridge Turnpike Company.*

At a meeting of the stockholders of the Blue Ridge turnpike company, held at Madison courthouse on Friday the 2d day of May 1851, in pursuance of a resolution of a called meeting of subscribers to stock in said turnpike company, held at said place on Friday, the 8th day of February 1850—the meeting was organized by the appointment of Paschal Graves, Esq., chairman, and William L. Early, clerk, and John H. McClung, assistant clerk.

There being present, in person and by proxy, a majority of stockholders, they proceeded to business.

The report of the president, with accompanying reports of the treasurer and of the committee of stockholders to examine the books, vouchers, &c. of the said company, and the report of the engineer, James Anthony, were received and recorded.

On motion, it was ordered that the bill or amendatory act to increase the capital stock of the Blue Ridge turnpike company, passed by the legislature January 1st, 1851, be accepted and adopted by this meeting; and also, that in obedience to 19th section of the 66th chapter of the new Code of Virginia, the 10th section of the 57th chapter and the 15th section of the 66th chapter of said Code be, and the same is hereby accepted and adopted by this meeting. And also, that the commissioners heretofore appointed to receive subscriptions of stock in this company be appointed as such to receive subscriptions under the aforesaid amendatory act of assembly.

On motion, G. N. Thrift, Joshua Miller and Thomas Buswell,

Esqs., were appointed a committee on proxies, who reported them in proper form.

On motion, it was ordered that the offices of treasurer and clerk be combined.

And on motion, an election of president and two directors was held, which resulted in the election of Colonel James Magruder of Orange as president, and Paschal Graves, Esq. of Page, and Milton Kirtley, Esq. of Madison, as directors.

PASCHAL GRAVES, *President.*

WILLIAM L. EARLY, *Clerk.*

*Report of the President and Directors of the Blue Ridge Turnpike Company to the Stockholders in general meeting held at Madison courthouse on the first Friday in May 1851.*

GENTLEMEN,

We have the honor to submit this as our first annual report, accompanied by the reports of the treasurer, and of James Anthony, engineer. This board was formally organized on the 9th day of February 1850, and thereupon selected the necessary officers, agents and engineers, to prosecute the work. We proceeded immediately to survey and examine the route of the road; and after several experimental surveys, we selected and adopted as the best the route now in course of construction, the grade of which at no place exceeds  $3\frac{1}{2}$  degrees, except at a very few difficult passes on the east side of the Blue Ridge, where it was found necessary to increase the grade to from 4 to  $4\frac{1}{2}$  degrees; and taken altogether, we are of opinion it is a fine location, considering the difficulties to be overcome. The entire length of the road from Gordonsville to the western terminus, is a fraction over fifty-six miles. The grading and bridging on the entire line, and the metaling of twenty-six miles, commencing at Gordonsville and extending to Criglersville on the Robinson river, were put under contract on the 15th of July last. Many of these contracts, including the contract for that portion of the road across the Blue Ridge, were abandoned by the undertakers on account of the low prices at which the contracts were taken. And consequently, we have been under the necessity of reletting at a considerable increased price; and we can now say that the entire work, including the necessary metaling on the mountain section, is under contract, at a total cost, as per statement of James Anthony, engineer, of

	115,429	00
Less amount of estimates paid,	-	- 30,694 40

Leaving a balance of	-	-	-	-	\$ 84,734 60
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to complete the work under the present contracts, by the terms of which the work is to be completed by the 10th day of February 1852;

at which time we confidently hope the road contracted for will be ready to receive travel.

Upon an examination of the line across the Blue Ridge, we find it necessary to metal portions of the same in order to render it a firm highway. That section is not required by the charter to be metaled. The fourth section, extending from the western base of the Blue Ridge to the western terminus of the road, is not under contract for metaling; portions of which section will require metal when the finances of the company will admit of it.

We would also report that the legislature at the late session passed an amendatory act increasing the capital stock of the company \$50,000, and authorizing the Board of public works to subscribe on the part of the state. We would recommend to the company to adopt this amendment, and proceed to get the stock taken on the part of individuals.

From the accompanying report of the treasurer you will see the amount which has been received and expended, and the financial condition of the company. The salaries of several officers and agents for the past year were at the following rate, viz: To Paschal Graves, president, \$600 per year. F. T. Geiger was employed to the 1st of November 1850 as engineer, at \$50 per month for a part of the time, and \$62 50 per month for the balance of the time. He was then dismissed, and Richard A. Henright employed at \$50 per month, up to the present time, and his services are still continued. Theophilus Suvoet was employed as assistant engineer, at \$30 per month to first of June 1850, when he quit, and William H. Clore was employed in his stead, at \$30 per month, which was afterwards raised to \$37 50, and finally to \$50 per month. Jas. Anthony, Esq. was employed on the 1st of March 1851, at the rate of \$800 per year; W. L. Early, secretary, at the rate of \$200 per annum; John McClung, treasurer, at \$300 per annum; Humphreys and Kemper, attorneys in Madison and Orange, at \$150 per annum; John McPherson, attorney in Page, at \$75 per year; R. S. Thomas, collector in Madison and Orange, at \$100, which was increased to \$175 per year; James T. Graves, collector in Page, \$75 per year; Edmund Henshaw, Milton Kirtley, Robert D. Twyman, John Weaver and George Kite, directors, each at \$2 50 per day whilst in the service of the company. The salaries of the president and directors were fixed by the company.

All which is respectfully submitted, by order of the board.

PASCHAL GRAVES, *President.*

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OFFICE BLUE RIDGE TURNPIKE CO.,  
April 30th, 1851.

To the President and Directors of the B. R. T. Co.

GENTLEMEN,

The undersigned respectfully submits his annual report of the financial condition of this company.

*Return of the state of the Blue Ridge Turnpike Company from the commencement, February 8th, 1850, to April 30th, 1851.*

Capital stock, 2,400 shares, at \$ 50 each,	-	120,000	00
Subscribed by the commonwealth, 1,440 shares, at \$ 50 each,	-	72,000	00
Subscribed by individuals, 960 shares, at \$ 50 each,	-	48,000	00
Amount of commonwealth's subscription unpaid,	-	33,007	11
Amount of individual subscription unpaid,	20,720	70	
Expense for construction,	-	30,694	40
repairs,	-	51	43
land damages,	-	12,015	80
engineering instruments, &c.	1,808	86	
incidental expenses,	-	214	86
printing and stationery,	298	21	
law,	-	374	00
directors,	-	936	25
officers' salaries,	-	1,421	42
Balance cash on hand,	-	18,456	96
		<u>\$ 120,000</u>	<u>00</u>
			<u>120,000 00</u>

*Statement of Receipts and Disbursements of the Blue Ridge Turnpike Company from the commencement, Feb. 8, 1850, to April 30, 1851.*

Receipts on capital stock :			
From individuals,	-	27,279	30
From Board of public works,	-	38,992	89
		<u>66,272</u>	<u>19</u>
Deduct disbursements :			
Expended for construction,	-	30,694	40
"    repairs,	-	51	43
"    land damages,	-	12,015	80
"    engineering instruments, &c.	1,808	86	
"    incidental expnses,	214	86	
"    printing and stationery,	298	21	
"    law,	-	374	00
"    directory,	-	936	25
"    officers' salaries,	-	1,421	42
Cash in hands of treasurer,	4,087	99	
Cash in Bank of Virginia,	14,368	97	
		<u>18,456</u>	<u>96</u>
			<u>\$ 66,272 19</u>

All of which is respectfully submitted,

JOHN H. McCLUNG, *Treasurer.*

*To the Stockholders of the Blue Ridge Turnpike Company.*

The committee appointed by an order of the board of directors of said company, at a meeting thereof held on the 1st of May 1851 to examine the books, accounts &c. of the company, and report to the next annual meeting of the stockholders, beg leave to submit the following: Your committee, by the aid of your treasurer, have performed the duties assigned them, and found the books to have been neatly and accurately kept, each item of disbursement being supported by a satisfactory voucher. The official bonds are in proper form, and the security perfectly satisfactory. All of which is respectfully submitted.

JAMES MAGRUDER,  
G. A. THRIFT,  
JOSHUA MILLER,

May 1st, 1851.

Committee.

*Report of Amount of Liabilities incurred at the Letting on the 15th of April 1851.*

For the second division—Bohannon & Co., contractors :

Section.	Contract price.	Payments.	Total.
1	2,700	1,379 99	1,320 01
2	2,700	375 00	2,325 00
3	3,000	495 00	2,505 00
4	2,700	356 00	2,343 00
5	2,700	1,033 80	1,666 20
6	2,700	108 00	2,592 00
			<u>\$ 12,751 21</u>

Bridge at Whiteoak run—Bohannon and Co., contractors :

Masonry 150 cubic yards, at \$ 2 87½,	431 25
Superstructure 45 lineal feet, at \$ 7,	315 00
Excavation 200 cubic yards, at 18 cents,	36 00
	<u>782 25</u>
Deduct payments to former contractors,	179 32
	<u>\$ 602 93</u>

Bridge at Mulatto run—Bohannon & Co., contractors :

Masonry 150 cubic yards, at \$ 2 87½,	431 25
Superstructure 45 lineal feet, at \$ 7,	315 00
Excavation 200 cubic yards, at 18 cents,	36 00
	<u>\$ 782 25</u>

Bridge at Robinson river—Bohannon & Co., contractors :		
Masonry 350 cubic yards, at \$2 87½,	1,006 25	
Superstructure 110 lineal feet, at \$14 50,	1,595 00	
Excavation 200 cubic yards, at 18 cents,	36 00	
	<hr/>	<u>\$ 2,637 25</u>

For the third division—Stain & Co., contractors :

Section.	Contract price.	
1	1,285	
2	1,800	
3	1,790	
4	1,840	
5	500	
6	260	
7	650	
	<hr/>	<u>\$ 8,125 00</u>
Probable amount of metal likely to improve road, say		
4,000 perches, at 60 cents,	- - -	2,400 00
For the fourth division, section 7—Kite, contractor,		500 00
“ 8—Graves “		300 00
Probable amount of metal on section 8, 1,000 perches, at		
60 cents,	- - - - -	600 00
Section 14—Jones & Co., contractors—	700	
“ 15 “ “ “	750	
“ 16 “ “ “	800	
“ 17 “ “ “	750	
“ 18 “ “ “	650	
	<hr/>	3,650 00
Estimate to complete the 9th, 10th, 11th and 13th miles,		1,250 00
		<hr/>
Total amount,	- -	<u>\$ 33,598 64</u>

The other liabilities of the company are as follows :

For the Gordonsville division,	-	49,171 48	
For Carney's contract, Page division,		6,685 00	
For bridges—Shenandoah,	6,313 00		
Rapid Ann,	4,265 96		
Blue run,	1,755 00		
	<hr/>	12,333 00	
		<hr/>	67,190 44
Total,	- -		<u>\$ 100,789 08</u>

In the report which I submitted to you previous to the letting, I estimated the sum necessary to complete the road at \$101,014. Upon the whole it has been let very slightly below that sum, say at \$100,789.

A portion of the road on the west side of the mountain will be much benefited by macadamizing perhaps about a mile in detached places. But in order to save expense, it might be advisable either to reduce



the depth of the metal or to diminish its width. Of the resources, I would myself prefer a single track of the ordinary depth and of eight feet wide. When teams meet on the road, the descending one could leave the track; and as they would rarely come together in the same place, there would be no danger of the earthen roads cutting up. The cost of macadamizing a single track of the length and other dimensions spoken of, would, at 60 cents per perch, amount to \$762.

I again repeat the suggestion, that it would be advisable to dispense with macadamizing portions of the 1st, 5th and 6th miles of the second division. I am still of opinion also, (notwithstanding Mr. Shaw has expressed himself to the contrary,) that it would be prudent to diminish the width of the road on points in the mountain to the minimum. As no clause was inserted in the contract in relation to these suggestions, the consent of the contractor may now be necessary. It may be an object to effect now this small saving. I am informed by the treasurer, that of the new stock not more than \$10,000, including the 12½ per cent. upon the contracts, has been taken.

Private stock, new,	-	-	-	10,000 00
State's quota,	-	-	-	15,000 00
Unexpended balance old stock,	-	-	-	76,000 00
				<hr/>
				<b>\$ 101,000 00</b>

*Statement of the Liabilities of the Blue Ridge Turnpike Company, of the date of April 30th, 1851.*

	Cost.	Payments.	Balance.
<b>East of western base of Blue Ridge:</b>			
Walker, Carter & Goodman, contractors, 14 miles, at \$2800 per mile,	44800 00	8127 16	36672 84
John Collins, contractor, 5 miles, at \$2800,	14000 00	4286 25	9113 75
Street contract,	1410 00	1410 50	
Mohannon & Strickler, contractors, 6 miles,	16500 00	3747 79	12752 51
Nix miles constructed, at a cost of	3060 00	3060 00	
Three miles forfeited, upon which payments have been made to the amount of	1893 75	1893 75	
Mair, Paul & Co., 7 miles at an aggregate,	8125 00	-	8125 00
John Carney, contractor, 4 miles,	6600 00	7660 00	6310 00
1 mile,	1860 00		
1 mile finished,	860 00	860 00	
Bridge at Blue run,	1370 00	-	1370 00
" at Rapid Ann,	5618 00	662 35	4955 65
Whiteoak and Mulatto run,	1241 00	179 33	1071 65
Robinson river,	2758 00	-	2758 00
<b>Total east of western base of Blue Ridge,</b>	<b>\$ 109295 75</b>	<b>25577 13</b>	<b>83129 40</b>
<b>West of western base of Blue Ridge:</b>			
Amount paid on forfeited contracts, from the 7th mile to the Shenandoah,	1833 75	1833 75	
Amount for which said contracts have been relet,	2050 00	-	2050 00
One mile finished,	630 00	630 00	
Shenandoah bridge,	8617 80	2631 67	5986 13
<b>Total west of western base,</b>	<b>13131 55</b>	<b>5095 42</b>	<b>8036 13</b>
<b>Making for both the grand divisions,</b>	<b>\$ 122427 30</b>	<b>30672 55</b>	<b>91165 53</b>

The first column shews the ultimate cost of the road, the second the payments to contractors, and the third the balance to be paid on completion.

The treasurer's account of this date shews an un-		
x-pended balance of old stock, amounting to	-	72,184 77
new stock, private,	10,000	
state, - - -	15,000	
	-----	25,000 00
Amounting to -		<u>\$ 97,184 77</u>

This will leave at the disposal of this board for all purposes whatsoever, (including, of course, the miles beyond the Shenandoah,) the sum of \$ 6,019 24.

Respectfully submitted.

JAMES ANTHONY, *Engineer.*

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OFFICE BLUE RIDGE TURNPIKE CO.,  
Madison C. H. October 31st, 1851.

*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

Enclosed herewith you will receive the report of the president and directors of this company for the year ending the 30th September 1851, with the treasurer's report annexed, also the report of the engineer, and a correct list of the stockholders other than the commonwealth.

Very respectfully, yours,

JOHN H. McCLUNG,  
*Treas. & Sec'y B. R. T. Co.*

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*Report of the President and Directors of the Blue Ridge Turnpike  
Company to the Board of Public Works.*

In submitting our second annual report, it affords us much pleasure to state that the operations of the past year have been marked by an energy and perseverance that give us the certain prospect of the speedy completion of the entire line of our road, notwithstanding the difficulties and obstacles to be overcome in constructing a comparatively level highway through a rugged and mountainous region. Our work, though seemingly insignificant in comparison with that of companies expending millions in opening new channels to market, is yet

one of great value and importance, penetrating as it does into a rich and fertile portion of the Valley, over mountains deemed heretofore almost impassable, and affording as it will the easiest and shortest communication with the markets of Eastern Virginia, and tending as it will to unite with us, in the strong bonds of commercial interest and social intercourse, a section of our state, whose feeling, from a long neglect of their claims to an accommodation of this character, had been in no slight degree alienated from old Virginia. By the construction of this road, an extended region of the Valley can, by a most excellent road of easy grade, of only some fifty or sixty miles distance, find their way to Gordonsville, where, by the Central railroad, the industrial wealth of the Valley will be poured into Richmond ; or, when the Alexandria railroad now in progress is completed, they will have a choice of markets, and will have the benefit of that competition for their trade, which its value and importance will no doubt excite between those cities—in either case enhancing materially the value of the interest of the state in those works to which she has so liberally contributed, and to which our road will be a most valuable tributary. Not only will the Valley be most signally benefited by this outlet afforded them, but a considerable section of our state this side of the Blue Ridge, whose claims to a share of public aid in appropriations to works of improvements had long been overlooked, will be accommodated to an extent that cannot fail to exercise a most salutary influence upon the industry of the people and the products of the country. Since the last annual report, all the sections of the road crossing the span of the Massanutten and Blue Ridge, then under contract, have been abandoned by the undertakers, the character and quality of rock to be encountered having proved such as to satisfy them that it was impossible to make the road at the prices agreed upon, without ruinous loss. These sections have been relet—some of them repeatedly—at rates, however, considerably higher than those first agreed upon ; but still it is believed at most reasonable prices, affording little if any profit to the contractor beyond the fair value of the work to be done.

By the advice and recommendation of their present engineer, Mr. James Anthony, the location of the road has been changed in several places, where economy in construction or superiority of ground rendered it proper.

It is but an act of justice to our accomplished engineer, to say that he has throughout acted with an energy, perseverance, skill and judgment, which have won for him the approval of the board, and which have shewn him eminently fitted to take charge of works of this character. From the activity and industry of the contractors now engaged on the mountain sections and throughout the line, and from the force in their employment, we are satisfied that the work will be completed by them, and that the board will not again be embarrassed by any portion of it being abandoned.

The engineer's report, herewith enclosed, will shew the amount of works of various kinds to be completed to cost \$138,754 65, and the balance due, to complete in full, \$56,115 78.

For the financial condition of the company we refer you to the treasurer's report. Accompanying this we herewith submit you a list of the individual stockholders. The salaries of the several officers and agents for the present year are, viz: James Magruder, president, \$450 per year; John H. McClung, treasurer and secretary—the two offices having been combined by order of the company at the last annual meeting—\$350 per year; Milton Kirtly and John Broomback, directors on the part of the stockholders; and Robert A. Banks, Elliott Blankenbaker and William Wayland, directors on the part of the state—Paschal Graves, who was elected by the stockholders at the last annual meeting, having resigned, the board of directors elected John Broomback, Esq. of Page in his place. The directors receive \$2 per day when engaged in the service of the company. The salaries of the president, treasurer, secretary and directors were fixed by the stockholders in general meeting: James Anthony, principal engineer, salary at the rate of \$1,000 per annum; William H. Clore, assistant engineer, salary \$700 per annum; R. J. Thomas, and T. F. Berry, collectors for the counties of Madison and Orange, salary \$175 jointly; James T. Graves, collector for Page county, salary \$75 per annum.

All of which is respectfully submitted, by order of the board of directors.

JAMES MAGRUDER,  
*President B. R. T. Co.*

*Return of the state of the Blue Ridge Turnpike Company for the year ending September 30th, 1851.*

Capital stock 3400 shares, at \$ 50 each, \$ 170,000 :	
Subscribed by the commonwealth 2040 shares, at \$ 50 each,	102,000 00
Subscribed by individuals 1158 shares, at \$ 50 each,	57,900 00
Individual stock not subscribed, 202 shares, at \$ 50 each, - - - - -	10,100 00
Amount of commonwealth's subscrip- tion unpaid, - - - - -	32,206 23
Amount of individual subscription un- paid, - - - - -	7,826 10
Amount of individual stock not sub- scribed, - - - - -	10,100 00
Expense of engineers' salary, instru- ments, superintending, location and construction, - - - - -	2,679 05
Expended for construction, - - - - -	82,795 11
“ repairs, - - - - -	97 87
“ land damage, - - - - -	12,170 80
“ law account, - - - - -	411 50

Expended for printing and stationery,	315	26	
"    incidental expenses, -	258	83	
"    directory, -	1,108	75	
"    officers' salaries, -	1,934	06	
Cash in the Bank of Virginia,	9,184	99	
Cash in the hands of treasurer,	8,911	65	
		18,096	64
		<u>\$ 170,000</u>	<u>00    170,000 00</u>

*Statement of Receipts and Disbursements of the Blue Ridge Turnpike Company for the year ending 30th September 1851.*

Cash balance on hand September 30th, 1850,	-	14,136	84
Amount received of individual subscribers,	-	39,873	24
"    "    of Board of public works,	-	55,194	03
Deduct disbursements within the year :			
Expended for construction, -	-	81,852	47
"    engineering, location, construction and instruments,		1,652	63
Expended for repairs, -	-	97	87
"    land damages, -	-	5,398	30
"    law account, -	-	189	50
"    printing and stationery, .		86	26
"    incidental expenses, -	-	194	05
"    directory expenses, -	-	448	75
"    officers' salaries, -	-	1,187	64
Balance cash in Bank of Virginia,	-	9,184	99
"    cash in hands of treasurer, -	-	8,911	65
		<u>\$ 109,204</u>	<u>11    109,204 11</u>

All of which is most respectfully submitted.

JOHN H. McCLUNG, *Treasurer.*

*To the President and Directors  
of the Blue Ridge Turnpike Company.*

*To the President and Directors Blue Ridge Turnpike Co.*

GENTLEMEN,

I submit to you a carefully prepared statement of the present condition of the line.

The first section is nineteen miles in length, and its account stands as follows :

Total cost when completed,	58800 00		
Amount already paid to contractors,		38749 62	
Balance due on completion,	-	-	20050 38

Street contract :

Cost,	-	1411 50	
Amount paid on same,	-		1411 50

Second section, ten miles in length :

Cost of construction,	-	17316 43	
Amount now paid to contractors,		10908 17	
Balance due when completed,		-	6408 26

Third section, nine miles in length :

Cost of construction,	-	11188 75	
Amount paid to contractors,		4607 40	
Balance,	-	-	6581 35

Of the fourth section, six miles are east of the western base of the Blue Ridge :

Cost of the six miles,		11645 93	
Paid to contractors,	-		4109 14
Balance due on completion,	-		7536 79

Cost of road east of western base of Blue Ridge,	-	\$100362 61	59785 83	40576 47
--	---	-------------	----------	----------

The bridges east of western base of same are :

The Blue run bridge, planking post,	1770 00		1770 00
Rapidan river bridge, lattice and arch,	7112 72	5943 03	1691 55
The Whiteoak run bridge, queen post,	850 32	850 32	
The Mulatto run bridge, queen post,	736 00		736 00
Robinson river bridge, lattice and arch,	3696 75	723 42	2973 33

Total of bridges,	-	-	\$14165 79	7516 77	7170 88
-------------------	---	---	------------	---------	---------

And total expenditure east of western  
base, - - -

114527 40 67362 60 47224 80

West of western base are the thir-  
teen remaining miles of the fourth  
section. Their condition in dol-  
lars and cents is as follows :

Cost when completed, - - 13558 25

Paid to contractors, 4997 27

Balance due on completion, - 8890 98

Shenandoah bridges, 2 spans of 145

feet each, lattice and arch, - 10339 00 10339 00

Total cost of work,

\$138754 65 82638 87 56115 78

By which it appears that the amount to be paid upon the comple-  
tion of the work, is \$ 56,115 75.

In a former report the total cost of construction was set down at  
\$ 122,427. It is now stated at \$ 138,754. This enlarged amount is  
in consequence of the company's having made contracts for metaling  
portions of the work beyond the Blue Ridge, which were not consi-  
dered in the former report, and to the letting of several abandoned  
contracts at advanced prices.

About thirty-five miles of the road in detached portions have been  
received from contractors as complete. The remainder of the work  
is progressing with rapidity, and is expected to be completed (with  
the exception, perhaps, of a portion of the mountain) by the spring of  
the next year. It is believed that in point of construction it will bear  
a comparison with any work of a similar kind in the state.

The Shenandoah bridge, necessarily a costly work, from its style  
and magnitude, is rendered still more so by over caution in having  
very thick walls in the abutments. It is, however, a superior struc-  
ture. The Rapidan bridge (to be completed next month) is perhaps  
amongst the best constructions in the state. The other bridges are  
of smaller dimensions. Each will probably be completed by the time  
specified in the contract.

Very respectfully,

JAMES ANTHONY, *Engineer.*

*Office of the B. R. T. Co.*  
*Sept. 30th, 1851.*



# BRANDONVILLE, KINGWOOD AND EVANSVILLE TURNPIKE COMPANY.

The following is the annual report of Thomas Scott, superintendent of said road :

By an order of the board of directors, I caused to be advertised and sold about forty-five rods of said road, so as to reach the east end of the wire bridge across Cheat river on the 19th day of February 1851, and to be completed on the 1st day of April following; and by an order of said board, held at Kingwood on the 10th day of June 1851, I caused numerous advertisements to be posted at all public places along the line of said road, and on the day therein named, June 24th, 1851, and the succeeding day, let all the road in sections of about one mile each, numbering from two to thirty-three, to the following contractors, at the prices indicated.

C. B. Trowbridge, 45 rods new road at the east end of Cheat bridge,	-	-	-	60 00
No. 1, Runs on Ohio river and Maryland turnpike road.				
2, William Matlick,	-	-	-	63 00
3, Same,	-	-	-	57 75
4, Sterling Graham,	-	-	-	61 50
5, William Matlick,	-	-	-	48 00
6, Same,	-	-	-	58 00
7, Benjamin Shaw, jr.	-	-	-	68 00
8, Daniel A. Darly,	-	-	-	63 00
9, Benjamin Shaw, jr.	-	-	-	49 50
10, William Matlick,	-	-	-	65 00
11, W. B. Crane,	-	-	-	90 00
12, William Carroll,	-	-	-	123 00
13, John P. Miller,	-	-	-	74 00
14, William Matlick,	-	-	-	79 00
15, William Snider,	-	-	-	59 50
16, John M. Francisco,	-	-	-	53 50
17, John W. Davis,	-	-	-	63 00
18, William Carroll, no bond,	-	-	-	80 00
19, Same, no bond,	-	-	-	48 00
20, William Matlick,	-	-	-	67 50
21, William Carroll, no bond,	-	-	-	60 00
22, Washington Couley,	-	-	-	72 50
23, Larkin Stone,	-	-	-	81 00
24, Abraham Hersman,	-	-	-	84 00
25, Same,	-	-	-	61 00
26, Alex. Bell, no bond,	-	-	-	93 50
27, Same, no bond,	-	-	-	75 50
28, Washington Couley,	-	-	-	63 00
29, Abraham Hersman,	-	-	-	58 00
30, Washington Couley,	-	-	-	62 00
31, James Clarke,	-	-	-	60 00
32, Same,	-	-	-	60 00
33, Same,	-	-	-	48 00

Total amount of sales,

\$2,209 75

The foregoing sections were all to be completed by the 15th of September 1851, and all contractors gave bond with security for the faithful performance of the same, except William Carroll, for No. 18, 19, and 21, and Alex. Bell, for 26, and 27; and they not being considered responsible men, at a meeting of the board of directors on the 12th day of August 1851, I was directed to purchase a team and tools necessary to repair said five sections, and to employ men for that purpose to work by the day.

In pursuance of said order, I purchased:

One yoke of oxen,	-	-	-	48 00
One cart,	-	-	-	20 00
One plough and extra irons,	-	-	-	17 00
Mattocks, shovels, &c.	-	-	-	15 73
Paid board of hands, &c.	-	-	-	313 55
				<hr/>
				<b>\$414 28</b>

A few of said sections have been completed, and the remaining sections so far advanced that commissioners have been appointed by the county court of Preston to examine and report the condition of said road; and upon their report the court of said county have authorized the erection of toll-gates, and we are now receiving toll. Owing to the severe drought and an unusual sickly season, the contractors were not able to complete their work in the time specified; and the contractors having performed a portion of their work, the board have authorized a compromise upon equitable terms.

Your obedient servant,

THOMAS SCOTT,  
*Superintendent.*

Amount of sales,	2,209 75
Deduct bad contracts,	357 00
<hr/>	
	1,852 75
Add repairing bad contracts,	414 28
<hr/>	
<b>\$2,267 03</b>	

*Brandonville, Va., November 17, 1851.*

## BUCHANAN AND BEDFORD TURNPIKE COMPANY.

BUCHANAN, BOTETOURT COUNTY,  
Oct. 25th, 1851.*To the Board of Public Works of Virginia.*

I herewith submit a statement from the treasurer of the company, shewing the receipts and disbursements of the Buchanan and Bedford turnpike company, from their organization to the 1st day of October 1851.

This turnpike will extend from Buchanan, in Botetourt county, to Fancy Farm, at the eastern base of the Blue Ridge, in Bedford county, passing through the gap between the Peaks of Otter and the Flat Top Mountain. The whole length of the road will be about 15 miles. Ten miles of it, from Buchanan to the Peaks of Otter, including the most difficult parts, have been put under contract, and the work is progressing well. The remaining five miles will be put under contract before the commencement of the next year; and it is confidently expected that the whole road will be completed and open for travel by the 1st day of July 1852. The grade will be unusually easy for a mountain road; and the plan of construction requires it to be 18 feet wide exclusive of ditches, except where blasted out of solid rock. When completed, it will open an attractive line for travel between the Virginia and Tennessee railroad at Liberty, and the Canal and Valley turnpikes at Buchanan, with the Peaks of Otter about equi-distant from each of these points; and I feel confident that it will yield a dividend to the stockholders of six per cent. per annum.

The making of a map of this road has been delayed by difficulties in the location of the last five miles. It will be made off as early as practicable and transmitted to you.

Very respectfully,

WM. W. BOYD,  
*President R. & B. Turnpike Co.*

F. A. MARTIN, *Treasurer,*  
*In account with Buchanan and Bedford Turnpike Co*

1851.

By this sum of Wm. W. Boyd, president for 1st instalment of \$ 2 per share on 20 shares of stock collected by him, - - - - - 40

By the following sums collected from the following stockholders for amount 1st instalment of \$ 2 per share on their shares of stock, and which were not paid by them to the president—to wit :

Isaac Burkholder on 2 shares,	-	-	4 00
Thos. J. Obenchain, 1 “	-	-	2 00
Thos. Cartmill, 3 “	-	-	6 00
John S. Wilson, 1 “	-	-	2 00
Joshua Taylor, 1 “	-	-	2 00
Wm. W. Boyd, 6 “	-	-	12 00
E. Valentine, 1 “	-	-	2 00
Benj. Wilkes, 5 “	-	-	10 00
Win. J. Reid, 3 “	-	-	6 00
Otho W. Kean, 1 “	-	-	2 00
F. A. Martin, 1 “	-	-	2 00
And. L. Boyd, 1 “	-	-	2 00
James W. Jopling, 1 “	-	-	2 00
R. N. Kelsoe, 1 “	-	-	2 00
James Jopling, jr., 2 “	-	-	4 00
Hardy & Martin, 4 “	-	-	8 00
Samuel Obenchain, 1 “	-	-	2 00
Leyburn Wilkes, 5 “	-	-	10 00

80

By the following sums from the following persons for amount, second instalment of \$ 8 per share on their shares of stock, to wit :

Hardy & Martin, 6 shares,	-	-	48 00
Leyburn Wilkes, 5 “	-	-	40 00
Win. W. Boyd, 10 “	-	-	80 00
Thomas Cartmill, 7 “	-	-	56 00
Otho W. Kean, 2 “	-	-	16 00
Jordan Anthony, 1 “	-	-	8 00
Ed Valentine, 3 “	-	-	24 00
John S. Wilson, 2 “	-	-	16 00
Charles T. Beale, 1 “	-	-	8 00
Jas. A. Haney, 1 “	-	-	8 00
W. S. W. Dunnavant, 1 “	-	-	8 00
F. A. Martin, 1 “	-	-	8 00
Joshua Taylor, 1 “	-	-	8 00
Thos. J. Obenchain, 1 “	-	-	8 00

Benj. Wilkes,	5 shares	-	-	40 00	
W. J. Read,	3 "	-	-	24 00	
Jas. Jopling, sen.	2 "	-	-	16 00	
R. N. Kelsoe,	1 "	-	-	8 00	
Jas. W. Jopling,	1 "	-	-	8 00	
				<hr/>	\$ 552 00

*Contra.*

May 23,	To the following sums paid by William W. Boyd, president, to different persons employed in the survey and location of road, to wit:				
	Wm. P. Dowthat,	15 00			
	Creed Reynolds,	12 00			
				<hr/>	27 00
July 2,	Paid for books,	-	-	-	1 25
"	Paid Michael Kerns, Jesse Kerns and Doro, their accounts for services as chain carriers,	-	-	-	2 00
Aug. 8,	This sum paid James Anthony, his account for services in the survey and location of road,	-	-	-	42 50
Sept. 15,	This sum paid Wm. T. Hardy, contractor, on account work done by him for company,	-	-	-	489 82
				<hr/>	\$ 562 57
Balance due treas'r Oct. 1st, 1851,					<hr/> <hr/> \$ 10 57

F. A. MARTIN,  
*Treasurer Buchanan and Bedford Turnpike Co.*

CHARLESTON AND POINT PLEASANT TURNPIKE  
COMPANY.

CHARLESTON, KA., Oct. 16th, 1851.

W. R. DRINKARD, Esq., *Sec'y.*

DEAR SIR,

I send a condensed return of the Charleston and Point Pleasant turnpike company to the 10th inst. The bridge now being built over Pocatalico creek is a fine structure, and will cost about \$2600. The road has declared no dividend.

Very respectfully,

JS. C. McFARLAND, *Treas'r.*

Trippike Company, year

F

B

I

		32,000 00	
		31,260 00	
		<hr/>	63,260 00
	work to date,		
			11,372 09
	post		800 00
	work in 1835 to		
		55,274 95	
	and		
	after		
		14,897 31	
		<hr/>	70,172 26
	ries. &c. &c. from		
			1,198 80
	on loans, &c. from		
			922 73
			465 00
	property for use of road,		310 00
			2,054 33
			<hr/>
			\$ 150,555 21
	Dec. 1850,	275 74	
	viz:		
		2,460 00	
		1,125 29	
		137 00	
		<hr/>	988 29
			326 14
			<hr/>
			\$ 4,050 17
	the year, viz:		
		1,733 84	
	paid for a horse		
		125 00	
	as above,	137 00	
	on 1st inst.,	2,054 33	
		<hr/>	\$ 4,050 17

of directors.

JS. C. McFARLAND,  
Sec'y and Treasurer.

Nov. 26. 1851

WASHINGTON CITY, Oct. 18, 1851.

Of the state of the Fairfax turnpike company, on the 30th ultimo, a return, examined and approved at a meeting of the president and directors, held to-day, is herewith transmitted, accompanied by lists of the stockholders and officers of the company. These are furnished agreeably to circulars of the Board of public works, heretofore forwarded to me. I have received none during the present year. The papers would have been earlier sent, but for my having been absent from home for several weeks.

Under an impression that, as president of the company, I was entitled to printed copies of the returns annually published, of the different improvement companies in the state, I have frequently applied for them; but although such books appear to have formerly been furnished to my predecessor, none have yet been received by me. If there be on hand any spare copies, as to the last four years, I should be obliged by the transmission of one of each to me.

**W. GUNTON, Pres. F. T. Co.**

*Return of the state of the Fairfax Turnpike Company, for the year ending 30th September 1851.*

Expended in the construction of the road and bridge from commencement, 1817, and in repairs many years ago, per former returns,	-	-	13,750 00
Expended between November 1846 and the present time, for repairs of road and bridge, and for erecting a new toll- house,	-	-	1,499 39
For collecting tolls and other incidental expenses,	-	-	338 33
For interest on money borrowed,	-	-	220 95
Capital stock, \$13,750 00 :			
Subscribed by individuals 167 shares, at \$50 each,	-	-	8,350 00
Subscribed by commonwealth,	-	-	5,400 00
Amount received from 1st September 1847 to this date, for tolls,	-	-	989 07
Due by the company :			
For money borrowed,	-	-	1,000 00
For money overdrawn,	-	-	69 60
			<hr/>
			\$15,808 67
			<hr/>
			15,808 67



*Statement of expenditures and receipts within the year.*

Disbursements during the year for im-			
provements and repairs,	-	138 37	
Expenses of collecting tolls,	-	72 00	
Interest paid,	-	70 33	
		<hr/>	280 70
Receipts for tolls,	-	-	241 10
			<hr/>
Overdrawn,	-	-	39 60
Do. per last return,	-	-	30 00
			<hr/>
			<u>\$69 60</u>

T. GUNTON,  
*Treasurer.*

*Washington City, 17th October, 1851.*

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*List of Officers of the said Company on the 30th September 1851.*

William Gunton, president; Lewis Bailey, Thomas Z. Smith, Francis A. Dickins, J. B. H. Smith, directors; Thomas Gunton, treasurer.

Attest,

W. GUNTON,  
*President Fairfax T. Co.*

*Washington City, 18th October 1851.*

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**FINCASTLE AND BLUE RIDGE TURNPIKE COMPANY.***Return of the state of the Fincastle and Blue Ridge Turnpike Road for the year ending 12th Sept. 1851.*

Capital stock allowed by the act of the legislature incorporating turnpike company, &c.			<u>\$ 8,000 00</u>
Subscribed by private stockholders 96 shares,			
\$ 50 per share,	-	4,800	
By the state 64 shares, \$ 50 per share,	-	3,200	
		<hr/>	<u>\$ 8,000 00</u>
Expended in constructing road,	-	-	<u>\$ 6,880 00</u>

Paid by private stockholders,	-	-	4,128	
By the state of Virginia,	-	-	2,752	
			<u>        </u>	<u>\$ 6,880 00</u>

Amount of toll collected on said road for the  
half year ending 12th March 1851, this sum, 484 87

Cr.

By expenses for the half year ending on the said 12th March 1851, which includes sala- ries to gate-keepers and officers, and all ex- penses for repairs to road,	-	-		208 06
				<u>\$ 276 81</u>

Of this last mentioned sum there was due to the state \$ 110 72 cents, which sum was duly paid into the branch bank of Virginia at Buchanan, within less than sixty days after the dividend was declared, to the credit of the state, &c. &c.

Amount of tolls collected for the half year end-  
ing 12th September 1851, this sum, - 501 80

Cr.

By amount of expenses for half year ending on the said 12th of September 1851, which includes in like manner salaries to gate-keep- ers, officers &c., and expenses in keeping road in repair,	-	-	-	221 96
				<u>\$ 279 84</u>

Of this last mentioned sum, there was due to the state the sum of \$ 111 93, which said sum will in like manner, within sixty days from the time the dividend was declared, be paid into the branch bank of Virginia at Buchanan to the credit of the state.

Of the sum of \$ 276 81, on hand for distribution on the 12th March 1851, there was due to the private stockholders the sum of \$ 166 09. Upon which last mentioned sum a tax of 1½ per cent. was set aside, making the sum of \$ 2 49.

Of the sum of \$ 279 84, on hand for distribution on the 12th day of September 1851, there was due to the private stockholders the sum of \$ 167 90. Upon which last mentioned sum a tax of 1½ per cent. was set aside, making the sum of \$ 2 51½.

The tax due the state of \$ 1 78½, on dividend as declared on the 12th September 1850, and the tax of \$ 2 49, on dividend declared 12th March 1851, and the tax of \$ 2 51½, (making in the aggregate \$ 6 79,) on dividend declared 12th September 1851, has not been paid—the treasurer of the company never having been called on for the amount &c., or instructed how to dispose of it.

James S. Walrond is a director and the president of the company ;

F. H. Mays is director and treasurer ; John Neville, Ferdinand Woltz, Martin McFerran, George W. Wilson, John Luster, directors.

It is deemed proper to say that the road is in tolerable order, and that from the report herewith forwarded it will appear that the state has received about 8 per cent. on the sum expended (by the state) for the year ending 12th September 1851.

All of which is respectfully submitted.

JAMES S. WALROND, *Pres't.*

F. H. MAYS, *Secretary.*

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### FRONT ROYAL TURNPIKE COMPANY.

WINCHESTER, Oct. 25th, 1851.

J. BROWN, Jr., *Second Auditor.*

SIR,

In conformity with the law, as set forth in your circular of the 1st September 1851, the president and directors of the Front Royal turnpike company make the following report, which, with the treasurer's report herewith transmitted, is respectfully submitted.

Since our last annual report to your board the work on the Front Royal turnpike has steadily progressed, and it is believed will be completed in six weeks, excepting about a quarter of a mile, it being that portion of the road which lies between the two branches of the Shenandoah river. The bridges not being as yet constructed over those branches, and the location of that portion of the road being such that it could not be used until they should be completed, it was thought best to concentrate our efforts on such portions as would be available as soon as finished.

Three "sections" of the road are complete, and we are now in the receipt of tolls from three gates, adjacent to two of which toll-houses have been erected—the one near Winchester, at the junction of the Front Royal and Berry's Ferry turnpikes, at the joint cost of the two companies. When the road shall be finished, twelve and a half miles will be macadamized, five and three-quarter miles planked, and two and three-quarter miles, passing on the sides of slate hills, which make a fine and substantial foundation, simply graded.

Plank roads being as yet somewhat of an experiment, at least a novelty in this state, it is deemed proper that we should be somewhat more explicit in our report of the mode of construction we have adopted, and the result thus far. The road was prepared as if for macadamizing; oak plank eight feet long and three inches thick were laid on four string pieces three inches thick by five wide, and

two feet from the edge of the grade, leaving twelve feet of the grade as a turn out when vehicles should meet. The grade is finished about two inches higher than the plank. The plank was delivered on the road at a cost of \$1762 per mile; the laying cost \$200 per mile, thus making the cost of the road, after grading, \$1962 per mile. If there was any objection to the road on the part of the public, it was because of its smoothness, and consequently becoming slippery in rainy weather where the grade is not low—an objection which, we are happy to believe, will be removed by the use and consequent roughening of the plank.

We contemplate putting the bridges under contract by the first of December.

At the organization of the company the capital was \$40,000; it was discovered that that sum would be insufficient for the completion of the road, and it was moreover considered highly important that the bridges above referred to should be built as early as practicable; an application was therefore made to the last general assembly for an increase of capital to \$60,000, and for a state subscription of three-fifths as before. The application was successful.

Warren county has voted a subscription of \$4,000 towards the construction of the bridges, and individuals have subscribed a sufficient amount to justify us in saying that the company will be free from debt when the road shall be completed.

Respectfully submitted.

O. R. FUNSTEN, *President*.

O. R. Funsten, president, salary per annum, \$300; Alfred Parkins, John Bruce, J. B. Petty, R. S. McThay and P. N. Meade, directors; J. W. Mason, treasurer and secretary, salary per annum \$200; Wm. Gore, first gate keeper, \$50; Joseph Steward, second gate keeper, \$75; ——— Vaughn, third gate keeper, \$60.

Stockholders heretofore transmitted.

## [ A. ]

*Return of the state of the Front Royal Turnpike Company for the year ending September 30th, 1851.*

Capital stock, \$ 40,000:		
Subscribed by individuals 320 shares, at \$ 50 per share, - - - -		16,000 00
Subscribed by commonwealth 480 shares,		24,000 00
Capital stock, (increased,) \$ 20,000:		
Subscribed by individuals 67 shares, -		3,350 00
Subscribed by commonwealth 100½ shares,		5,025 00
Due for money borrowed of the Valley Bank,		2,500 00
Amount of commonwealth's subscription unpaid, - - - -	8,217 00	
Amount of individual subscriptions unpaid,	5,478 00	
Amount expended in construction of work from commencement to date:		
Amount paid Littlejohn, Kirby & Co. for grading and macadmizing, - -	20,875 00	
Paid Milton Moore for macadamizing, -	1,750 00	
Paid Lupton for planking, - -	9,760 00	
Paid Smith for inspecting plank, -	75 37	
Paid Richardson & Penman for outlets, -	65 00	
Paid land damages to date, - -	933 47	
Paid for constructing tollhouses, - -	374 08	
Paid M. S. Lovett & Co. for engineering,	223 50	
Paid officers' salaries for two years, -	1,000 00	
Paid attorneys' and other fees, - -	180 67	
Incidental expenses, - - - -	129 00	
Cash on hand, as per statement B, -	1,813 91	
	<u>\$ 50,875 00</u>	<u>50,875 00</u>

## [ B. ]

*Statement of Receipts and Expenditures within the year:*

Balance of money on hand, as per report October 1st, 1850, - - -	486 62
Add receipts during the year, viz:	
For capital stock—amount received from individuals, - - - -	10,877 00
Amount received from Board of public works,	20,808 00
Amount borrowed of Valley Bank, -	2,500 00
Deduct disbursements during the year:	
Amount paid Littlejohn, Kirby & Co. for grading and macadamizing, - -	18,955 00
Paid Milton Moore for macadamizing, -	1,750 00

Paid Lupton for planking,	-	-	9,760	00
Paid Smith for inspecting plank,	-	-	75	37
Paid Richardson & Penman for outlets,	-	-	65	00
Paid land damages,	-	-	483	47
Paid interest on \$ 2500 borrowed,	-	-	82	00
Paid for engineering,	-	-	102	00
Paid for construction of toll-houses,	-	-	374	08
Paid officers' salaries, (2 years,)	-	-	1,000	00
Paid attorneys' and other fees,	-	-	166	67
Incidental expenses,	-	-	44	12
			<u>32,857</u>	<u>71</u>
				<u>34,671</u>
				<u>32,857</u>
				<u>71</u>
Cash on hand,	-	-		<u>\$ 1,813</u>
				<u>91</u>

J. W. MASON,  
*Sec'y and Treasurer.*

## FRONT ROYAL AND GAINES' CROSSROADS TURNPIKE COMPANY.

At a meeting of the board of directors of the Front Royal and Gaines' Crossroads turnpike company, held at the clerk's office in Front Royal, on the 14th day of October 1851, the following report was adopted, and ordered to be signed by the secretary and forwarded to the Board of public works.

The president and directors of the Front Royal and Gaines' Crossroads turnpike company submit to the Board of public works the following report of their proceedings within the year ending the 30th September 1851. The board having at the general annual meeting of the stockholders, held at the courthouse in Front Royal, on the first Monday in May 1851, made a report giving a detailed account of their proceedings up to that date, do not think it necessary here to repeat the contents of that report, as a certified copy of it was forwarded to the Board of public works. It will, therefore, only be necessary to say, that since the transmission of that report the road has been finished (or very nearly so) to its terminus at Gaines' Crossroads; the last section, however, has not yet been received from the contractors, nor has the board yet been able, from causes beyond their control, to get that section under toll, although the travel is now upon its whole length. They hope in a few days to be able to say that they are receiving tolls for the whole length of the improvement. The road is now in good condition, and meets the unqualified approbation of the traveling public.

The cost of construction, as also the land damages and other expenses incidental to the prosecution of the work, will be ascertained by reference to the report of the treasurer, which has been carefully examined and is herewith forwarded.

By this document it will be seen that there has been

received from stockholders other than the common-wealth, the sum of	-	-	5,530 00
From the Board of public works,	-	-	8,595 00
Tolls received,	-	-	159 50
			<hr/>
			14,284 50

And that the expenditures paid up to this date for all purposes amount to the sum of	-	-	11,689 49
			<hr/>

Leaving balance in treasurer's hands of this sum,	-		<u>\$2,585 01</u>
---	---	--	-------------------

The whole of which balance, and the balance of stock yet unpaid, will be required in paying balances due for construction, officers' salaries, erecting toll-houses, repairs of road, and other necessary expenses. The board has again to regret that they have not yet been able to settle the land damages upon the whole line—the suit mentioned in the report hereinbefore referred to as pending in the court of Rappahannock county, upon exceptions taken by the board to a report of commissioners, in which the award of damages was considered too extravagant to be submitted to, is still pending. The road is kept in repair by the employment of a man by the year to keep it in good order throughout its whole length. A list of private stockholders, length of improvement, average cost per mile, and list of the officers and agents of the company, and the amount of their salaries, are herewith sent, attached to the treasurer's account, as part of this report. A map of the improvement has been furnished heretofore.

Signed by order of the board.

ROBERT TURNER,  
*President.*

Test,

N. M. JACOBS, *Clerk.*



*Return of the state of the Front Royal and Gaines' Crossroads Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$ 15,000:		
Subscribed by individuals 116 shares, at \$50 each,	-	5,800 00
Subscribed by the commonwealth 180 shares, at \$ 50 each,	-	9,000 00
Yet to be subscribed by individuals 4 shares, at \$ 50,		200 00
Tolls received,	-	159 50
Amount of commonwealth's subscription unpaid,	505 00	
Amount of individual subscriptions unpaid,	270 00	
Amount of 4 shares of stock not taken by individuals,	200 00	
Amount expended in construction of this work from commencement (1850) to this date,	10,275 62	
Amount paid for engineering, -	185 00	
Amount paid for incidental expenses, -	104 66	
Amount paid for president's salary past year,	200 00	
Amount paid for sec'y and treasurer's salary,	125 00	
Amount paid toll receiver's compensation,	25 00	
Amount of cash on hand 30th Sept. 1851, as per statement below,	2,595 01	
	<u>\$ 15,159 50</u>	<u>15,159 50</u>

*Statement of Receipts and Expenditures to 30th Sept. 1851.*

For capital stock—amount received from individuals,	5,530 00
Do. do. do. from Board P. works,	8,595 00
Amount of tolls received to this date, -	159 50
	<u>14,284 50</u>

Deduct disbursements during the present year:		
Am't paid for construction, including bridges, &c.	10,275 62	
Amount paid for land damages,	274 21	
Do. do. engineering,	185 00	
Do. do. incidental expenses,	104 66	
Do. do. president's salary,	200 00	
Do. do. sec'y and treasurer's salary,	125 00	
Do. do. toll receiver's compensation,	25 00	
	<u>11,689 49</u>	
Balance money on hand,	<u>\$ 2,595 01</u>	

By order of the board of president and directors.

N. M. JACOBS, *Clerk.*

*List of Officers and Agents of Front Royal and Gaines' Crossroads Turnpike Company.*

Robert Turner, Esq., president, salary past year \$200; James M. Barbee, Marcus B. Buck, Samuel B. Gardner, John B. Petty and Addison Turner, directors; Mahlon S. Lovett, engineer, salary \$5 per day when his services are required; N. M. Jacobs, secretary and treasurer, salary \$125; Albert Meniffee and Neverson Smith, toll-gate-keepers, salary \$50 each per annum; Giles Cook, attorney to the board.

Length of improvement about 16½ miles, and very nearly finished.

Average cost of the road for all purposes, so far, is a little over seven hundred dollars per mile.

N. M. JACOBS,  
*Treas'r and Clerk.*

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**HARDY AND WINCHESTER TURNPIKE COMPANY.**

*Fourth Annual Report of the Hardy and Winchester Turnpike Company to the Stockholders.*

As nothing of any particular interest in the affairs of your company has transpired since your last annual meeting, in offering the fourth annual report of the Hardy and Winchester turnpike company, it will perhaps be proper to make a brief statement shewing the whole amount expended in the construction of the improvement from the commencement of the work up to the 30th of September 1851, the receipts and expenditures for the same period, and such explanations as will give you a full exhibit of the financial condition of the company, together with such suggestions as the nature of the subject may seem to require.

The capital stock authorized to be raised is	-	\$ 39,000 00
The stock actually subscribed by individuals is	-	15,275 00
Subscribed by the commonwealth,	-	22,318 26
		<u>\$ 37,593 26</u>
Private stock yet to be raised to secure three-fifths of the capital,	-	\$ 425 00
Amount paid for construction on the main stem of the road is	-	29,218 14
Amount paid for constructing Capon spring branch,		4,150 36
Amount for location, incidental expenses, engineering, &c.		1,038 45
Amount for bridge over Lost river,	-	1,665 00
Amount for land damages, costs, &c.	-	654 98
Amount for toll-houses, lots and improvements,	-	1,067 33
		<u>\$ 37,794 26</u>

To which must be added various charges for interest, changing roads to secure tolls, &c. &c., as may be seen in the treasurer's report.

The whole cost of repairs and superintending the same has been as follows :

Repairs to Sep. 30, 1849,	404 50	—nett tolls same time,	409 11
1850,	888 75	do. do.	1153 53
1851,	1312 72	do. do.	1218 09
	<u>\$ 2605 97</u>		<u>\$ 2780 73</u>

From the above statement it will be seen that the whole of the stock actually subscribed has been expended in the construction of the work, and that the company is still encumbered with a small debt.

Application was made to the last legislature for an increase of the capital stock of the company in order to meet the liabilities incurred in the construction of the Capon springs branch and the erection of toll-houses. An increase of \$ 4,000 was obtained, making the capital stock of the company \$ 39,000, the state taking "three-fifths of all stock that had been or might hereafter be subscribed." This enabled the company to reduce its debt, and it is earnestly recommended that exertions be made to have the remainder of the private stock taken which will enable the company to discharge all its liabilities.

It will also be seen, from the foregoing statement, that the receipts from tolls have been found adequate to defray all the expenses of repairs, except during the year which has just ended, for which there is an inconsiderable deficiency. About the beginning of the last fiscal year the board of directors resolved to dispense with the office of general superintendent of repairs, and to employ some competent person "to labor with and superintend the hands," allowing him a specified sum per day, and also stipulating the per diem wages to be paid to each hand. It was supposed that this course would promote economy and lessen the cost of repairs; but the result has shewn that, although there has been a much greater amount of labor done, there has also been a proportionate increase in the aggregate cost of repairs. It is, however, but justice to say that, owing to the open winter and wet spring, the road had become very much cut up, and that many of the repairs done this year have been of a permanent character, so that it is believed that parts of the road will require but little repairs for several years. A rigid scrutiny into accounts for repairs should be instituted, and it is recommended that hereafter every exertion should be made to keep the expenditures within the receipts.

It is to be regretted that the sanguine hopes which were entertained of the large amount of travel and transportation which would pass over the Hardy and Winchester turnpike road have, in some measure, been disappointed. After your charter had been obtained, and after a considerable amount of stock had been subscribed to make the road from Winchester to Moorfield, a charter was granted to the Moorfield and North branch turnpike company to run a road from Petersburg in the county of Hardy to the Green spring depot in the county of Hampshire, on the Baltimore and Ohio railroad.

This, of course, was a rival road, but it was expected that the advantages of trading at Winchester would more than counterbalance the easier grade and shorter distance to the depot. These expectations have not been realized; and as by the Moorfield and Alleghany turnpike, and the stem from Petersburg to the last named road, both of which have been chartered since your road went into operation, the travel and transportation from the upper part of the South branch valley can reach Paddytown on the continuation of the Baltimore and Ohio railroad at *a still shorter* distance, it is not to be expected that any considerable amount of the trade from the South branch valley will pass over your road.

In addition to these drawbacks, the last legislature chartered a company to construct a road from some point near Bean's tavern, on the H. and W. turnpike, down North river to Blue's tavern on the N. W. turnpike. It is supposed that this last named road will take a portion of the little business from the S. B. which would still have been done over the H. and W. turnpike road; and the case will present another striking example of that reckless legislation which makes a road this year, which it will injure by an improvement to be made the next—and both of which it will ruin by making another improvement the year following.

It is, however, gratifying to observe that there has been a steady increase in the tolls received at gates Nos. 1 and 2, and a slight increase during the last quarter at gates Nos. 3 and 4. This has been owing to the travel to and from the Capon springs and Howard's lick during the watering season. Should the business done at the Capon springs continue to increase, or even if it should remain at what it was during the present year, and should the improvement now being made at Howard's lick be completed, there is every reason to believe that the H. and W. turnpike company will be fully able to sustain itself. It should have been mentioned that the road from the Capon springs to the Capon river, which was under construction at the time of your last annual meeting, has been completed. As this extension was made on the application of those persons interested in the springs, and designed principally for the accommodation of the visitors, and as the private stock was all paid by the owners of the spring property, no gate has been put up on this part of the road, the liberal proprietors of the property at the springs having paid a sum which was believed to be sufficient to keep the road in good repair.

For farther particulars concerning the operations and business of the company, you are referred to the report of the treasurer which is herewith appended, and all of which is respectfully submitted.

J. J. WILLIAMS,  
*President H. and W. T. Co.*

[Recorded.]

## OFFICE HARDY AND WINCHESTER TURNPIKE CO.

*To the Board of Public Works.*

At a meeting of the board of directors of the Hardy and Winchester turnpike company, held at McKeever's hotel in the town of Wardensville, on Monday the 20th of October 1851—present, J. J. Williams, president, Henry W. Frye, John M. Hopewell and James A. Russell, directors :

The board having met for the purpose of making its annual report to the Board of public works, shewing the financial state of the Hardy and Winchester turnpike company and the condition of the improvement, and of furnishing such other information as may be required by the Board of public works, respectfully reports—That in consequence of the severe illness of Gen. James H. Carson, the state proxy in this company, the annual meeting of the stockholders, which was advertised to be held on the 18th of the present month, was not attended by a sufficient number of stockholders and proxies to form a quorum, and was adjourned over to the 28th of November next.

The annual report of the president and the statement of the treasurer of the company, prepared for that occasion and herewith transmitted, have been examined by us, approved and adopted, as containing a fair exhibition of the state of the company, and embracing most of the information required of us by the Board of public works. At the commencement of the last fiscal year, the board of directors concluded to dispense with the office of general superintendent of repairs, and to employ a man to labor with and superintend the hands. An agreement was made with John H. Marker to keep in repair that part of the road between Winchester and Wardensville, including the Capon springs branch, being 24 miles on the main stem and 7 miles of the Capon springs branch—in all, 31 miles. It was agreed to allow the superintendent \$1 50 per day for his own services, and 75 cts. per day for each hand—he boarding himself and the hands. The price for horses, ploughs, &c., when necessarily employed, was also agreed on. The section extending from Wardensville to Baker's run—11 miles—was let on the same terms, to George Cline, jr. The section extending from Bean's tavern to Moorfield was let in the same way to Thomas C. Athey, except that he was to receive but \$1 per day for his own services and board. The intervening section was let to Samuel Davison and Cephas Childs—4 miles to the former—at \$13 12½ per mile, and the remainder to the latter, at \$9 per mile. The whole length of the road from Fiser's to Moorfield is 54½ miles—Capon springs branch is a little over 7 miles—making whole distance 61½ miles.

Marker, 31 miles, whole of repairs cost	616 12½, average	19 87½
Cline, 11 " " " "	148 00 "	13 45
Athey, 10½ " " " "	401 10 "	38 20
Davison, 4 " " " "	52 50 "	13 12½
Childs, 5 " nearly, " "	45 00 "	9 00
	<hr/>	<hr/>
	1,262 72	" 20 53
For carrying two roads to secure tolls,	50 00	
	<hr/>	
	\$ 1,312 72	
	<hr/>	

Gate No. 1 is kept by Charles C. Hawkins, salary \$ 75 per year.

" 2 " John Huff, " \$ 75 "

[These occupy their own houses.]

Gate No. 3 is kept by Henry Reynolds, 10 per cent. on am't collected.

" 4 " James D. Boone, " " "

" 5 " Thomas Athey, " " "

[These occupy houses belonging to the company.]

Henry W. Frye was allowed \$50 for settling with the gatekeepers quarterly, and paying the amount to the treasurer.

N. Clevenger is allowed \$150 for his services as treasurer and secretary.

The cost of toll-house and lot No. 5 was much increased by a failure to obtain water on the first lot procured. Another lot was obtained, the house was made and another well sunk.

With the exception of a few miles on the North Mountain, where the road was injured by heavy rains, the road is in fine order and will need but little repairs this fall; and as much of the repairs done this year has been of a permanent nature, it is hoped that the receipts from tolls will exceed the expenditures for repairs for the year ending the 30th September 1852.

It is expected that the road will be kept in repair in the same manner as it was last year, unless the officers to be elected next month should make a change.

A list of the stockholders, with the number of shares owned by each, and the amounts still due, will accompany this report.

It is believed that a map of the road has been sent.

JARED J. WILLIAMS, *President.*

H. W. FRYE,  
JOHN M. HOPEWELL,  
JAMES A. RUSSELL,

[*Recorded.*]

*Directors.*

*Return of the state of the Hardy and Winchester Turnpike Company for the year ending 30th September 1851.*

Amount commonwealth's subscription unpaid,	1,081 74	
Amount individual subscription unpaid, -	285 38	
Expended in construction from commencement, 1847, to present date, - -	33,359 67	
Land damages, and suits on same, - -	654 98	
Bridge across Lost river, - - -	1,665 00	
Location and cost incidental thereto, including printing, notices, &c. - -	1,100 32	
Costs of toll-houses Nos. 3, 4 and 5, -	1,017 33	
Amount paid in repairs from commencement,	2,639 17	
Capital stock, \$ 39,000 :		
Subscribed by individuals, 303½ shares, at \$50 each, - - - -	15,175 00	
Subscribed by commonwealth, 468 shares, at \$50 each, - - - -	23,400 00	
Tolls from commencement (nett,) - -	2,527 74	
Due by company for money borrowed, viz :		
From V. Bank, - - - -	500 00	
Balance due treasurer, - - - -	200 85	
	<u>\$ 41,803 59</u>	<u>41,803 59</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report, - - - -	2,291 08	
Add receipts during the year, viz :		
For capital stock—amount received from individuals, - - - -	280 14	
Amount received from B. of P. works, -	2,518 26	
Tolls received within the year (nett,) -	1,218 09	
Deduct disbursements during the year :		
Amount paid for construction, &c. - -	3,305 36	
For toll-house No. 5, - - - -	436 24	
Repairs paid within the year, - - -	1,312 72	
Officers' salaries, (treasurer,) - - -	150 00	
Toll receivers' compensation and other expenses collecting tolls, - - - -	256 45	
Debt paid Valley Bank, \$500 ; int. \$112 12,	612 12	
Balance due from treasurer, - - - -	234 68	
	<u>\$ 6,307 57</u>	<u>6,307 57</u>

JARED J. WILLIAMS, *Pres't*  
H. & W. T. Co.

N. CLEVINGER, *T. H. & W. T. Co.*



## HAMPSHIRE AND MORGAN TURNPIKE COMPANY.

*The Report of the President and Directors of the Hampshire and Morgan Turnpike Company to the Board of Public Works.*

Our work was commenced about 1st October 1849. Since that time about eighteen miles, extending from the Baltimore and Ohio railroad in Morgan county to the top of Sandy Ridge in Hampshire, have been located, and all of it finished but about a quarter or half of a mile, the work on which has been delayed in consequence of difficulties thrown in our way by some one or two land-holders. The public has had the use of the finished part of the road. It is expected that in a few weeks toll-gates will be put upon it. No system has yet been adopted for keeping the road in repair. The average cost of the road, as far as finished, has been about \$ 500 per mile.

The above, together with a list of the private stockholders and a statement shewing the financial condition of the company, is respectfully submitted.

By order of the president and directors.

A. SOMMERVILLE, *Sec'y & Treas'r*  
H. & M. T. Co.

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*Return of the state of the Hampshire and Morgan Turnpike Company for two years ending 30th September 1851.*

Capital stock, \$ 9,687 50 :			
Subscribed by individuals,	-	-	3,875 00
the commonwealth,	-	-	5,812 50
Amount of commonwealth's subscription unpaid,	-	-	112 50
Amount of individual subscription unpaid,			75 00
Expended in construction of work from commencement to this date,	-	-	7,967 56
M. S. Lovett engineer, and his assistants,			130 50
Expended in land damages for same time,			68 00
Expended in finishing section left by contractors in an unfinished state,	-	-	775 96
Cash on hand 30th September 1851,	-		557 98
			<hr/>
			\$ 9,687 50
			<hr/>
			9,687 50
			<hr/>



## HARRISVILLE TURNPIKE COMPANY.

*Return of the state of the Harrisville Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$ 10,000 :			
Subscribed by individuals 80 shares, at \$ 50 each,			4,000 00
“ the state, 120 “ “			<u>\$ 6,000 00</u>
Amount of commonwealth's subscription unpaid—nothing.			
“ individual “ “ “			
Expended in construction of the work from commence-			
ment (1849) to this date, - - -			7,852 18
For locating and contingent expenses, including offi-			
cers' salaries and treasurer's per cent. - -			1,752 94
Balance in hands of treasurer, - - -			394 88
			<u>\$ 10,000 00</u>

Contractors Craver & Mills, having relinquished their contract after having received on their work \$ 4,728 23½, their unfinished contract was re-let to John Yoakam for \$ 695, and by him completed.

The whole road, about 20¾ miles in length, has been received by the superintendent from the hands of the contractors as finished, having cost an average of \$ 457 38 per mile.

The road has been let out to G. W. Hardman to be put in repair, for the sum of \$ 140, which is to be paid out of the funds in the hands of the treasurer.

The company expect to put up gates for the collection of tolls as soon as the contract for repairs shall have been completed, which will be in the course of a few weeks.

The officers of the company are Eli Riddle, president ; John Harris, James Malone, Noah Rexroad, Isaiah Wells and Z. M. Peirpoint, directors ; A. S. Core, superintendent ; Thos. M. Harris, treasurer ; Isaiah Wells, clerk.

The salary of the president and directors is \$ 1 50 per diem while employed ; of the superintendent, \$ 2 per diem while employed ; of the treasurer, 2½ per cent. on all moneys received, and 2½ per cent. on all paid out ; of the secretary for the past year, nominal.

All which is respectfully submitted.

ELI RIDDLE, *President.*

ISAIAH WELLS, *Secretary.*

October 23d, 1851.

## HILLSBOROUGH AND HARPER'S FERRY TURNPIKE COMPANY.

OFFICE HILLSBOROUGH AND HARPER'S FERRY  
TURNPIKE Co., *Harper's Ferry*, Nov. 12, 1851.

*Statement of Funds of the Company to date, viz :*

Amount received from stockholders other than the state of Virginia,	-	-	-	-	<u>\$ 2,757 50</u>
Threc-fifths due from state subscription,					4,136 25
Amount received from the state,	-	-	-	-	<u>2,130 00</u>
Amount now due from the state,				-	<u>\$ 2,006 25</u>

We, J. E. P. Daingerfield, treasurer, and Philip Coons, president of the Hillsborough and Harper's Ferry turnpike company, do hereby certify, that there has been received the sum of twenty-seven hundred and fifty-seven dollars and fifty-cents from stockholders other than the state of Virginia, to stock of said company ; which entitles the company to the sum of forty-one hundred and thirty-six dollars and twenty-five cents on account of the state subscription ; of which sum twenty-one hundred and thirty dollars have been received, leaving the sum of two thousand and six dollars and twenty-five cents now due and payable on the part of the state of Virginia. Witness our hands and the seal of the company this 12th day of November 1851.

PHILIP COONS, *President.*

J. E. P. DAINGERFIELD, *Treasurer.*

## HOLLIDAY'S COVE TURNPIKE COMPANY.

*Annual Report of the Holliday's Cove Turnpike Company for the year ending September 30th, 1851.*

Capital stock, \$ 11,833 33 :			
Subscribed by individuals 142 shares, \$ 50 each,	-	7,100	00
“ commonwealth 94 $\frac{3}{4}$ “ “ -	-	4,733	33
Tolls, rents, &c. from commencement of work,	-	3,684	39
Dividends unpaid, - - - -	-	236	66
Due the company other than on account of stock, - - - -	-	91	00
Expended in construction of road, -	11,182	94	
“ repairs to this date, -	3,404	19	
Dividends from commencement, -	828	32	
Cash on hand, as per statement below,	247	93	
		<hr/>	<hr/>
		\$ 15,754	38 15,754 38
		<hr/>	<hr/>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last year's report, - - - -	6	39
Tolls, rents, &c. - - - -	381	78
	<hr/>	
Total receipts,	\$ 388	17
	<hr/>	
Deduct disbursements during the year :		
For improvements and repairs, -		74 24
Officers' salaries, (treasurer and secretary, \$ 8 each,) - - - -		16 00
Collecting tolls, - - - -		50 00
		<hr/>
Total disbursements—deduct from receipts,		140 24
		388 17
		<hr/>
Balance on hand,		\$ 247 93
		<hr/>

Dividend of 2 per centum declared September 30th 1851, payable immediately.

By order of the board of president and directors.

JAMES ROSS, *Secretary.*

Length of road, a fraction over 6 $\frac{1}{4}$  miles. Road divided into four sections, with a superintendent on each section to conduct repairs. Average cost per mile, nearly \$ 1,789 23.

James Campbell, president; James Gardiner, Thomas Orr, Samuel Hindman, company directors; G. G. Orr, James Patterson, commonwealth directors; G. G. Orr, treasurer; Jas. Ross, secretary, Thos. Brandon, gate-keeper.

# HOWARDSVILLE AND ROCKFISH TURNPIKE COMPANY.

*To the Board of Public Works.*

GENTLEMEN,

The return of Mr. Hartsook, treasurer of this company, will exhibit the whole fiscal management of the company, in a condensed view, to the present time, which is herewith transmitted. At the last report the road was let to contractors to the eastern base of the Blue Ridge. These contracts have been finished, and the company have also, during the past year, extended the road across the Blue Ridge into the Valley, to Bock creek in the county of Augusta, a distance of about 34½ miles from the James river canal at Howardsville, and in time for a portion of the present crop of flour and other productions of that portion of the Valley to find a market over their road, when the company will realize their most sanguine expectations in the amount of trade and travel on the road and the tolls therefrom. The board of directors will in a short time proceed to let out additional sections of the road, extending it westwardly across the Valley to intersect with the Free turnpike, according to the terms of the charter as amended at the last session of the legislature; and from the favor which has been extended to the work, and the increased interest manifested in the progress of the road by the enterprising and wealthy proprietors along the line of its proposed route, the company feel assured that it will be speedily carried forward to completion. The repairs done in the past year have been partly by special contract and partly by the hirelings of the company. In future the company will probably be enabled to make more advantageous arrangements to keep up the repairs than was practicable on a short line of road. The board of directors will in a short time proceed to establish other gates for the collection of tolls, which heretofore they deemed unnecessary until the road had reached the Valley.

Respectfully submitted.

WM. A. SCOTT, *Pres't.*

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## *Return of the state of the Howardsville and Rockfish Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$ 45,000 :		
Subscribed by individuals,	- -	18,000 00
Subscribed by the commonwealth,	- -	27,000 00
Tolls on part of the work from the commencement to this date,	- - -	319 00
Amount of commonwealth's subscription unpaid,	- - - -	9,600 00
Amount of individual subscriptions unpaid,	- - - -	6,400 00

Expended in construction of work from commencement (1847) to date, viz :

Engineering expenses,	436	81		
Paid to com'rs for assessing land damages, attorneys' fees, costs of suits, witnesses, &c.	261	56		
Paid for mile posts,	20	00		
Paid to contractors,	21,087	24		
Paid salaries to officers and directors,	702	00		
			22,507	61
Expended in land damage same time,	-		5,460	96
Expended in repairs same time,	-		762	86
Cash on hand 30th September 1851, as per statement below,	-		587	57
			<u>\$ 45,319</u>	<u>00</u>
				<u>45,319 00</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report,	-	-	-	-	5,598	02
For capital stock—amount received of individuals,	-	-	-	-	2,800	00
Amount received from Board public works,					4,200	00
Tolls,	-	-	-	-	237	00
Total receipts,	-	-	-	-	<u>12,835</u>	<u>02</u>

Disbursements during the year :

Paid to contractors, viz :—Hartsook & Thurmond, \$ 8971; N. Bridgewater, \$ 145; J. N. Thomasson, \$ 1056	38,	-	-	10,172	38
Engineering expenses, viz :—N. J. Barnett, \$ 10, \$ 253; E. Hunter, \$ 5,	-	-	-	268	00
Paid to assessors, costs of suits, &c.	-	-	-	83	86
Paid for land damages,	-	-	-	946	35
Paid for repairs,	-	-	-	484	86
Salaries—President, \$ 75; secretary, \$ 50; treasurer, \$ 50; directors, balance for 1849, \$ 57; in part for 1850, viz: N. F. Cabell, \$ 16; J. Fortune, \$ 26; W. A. Scott, \$ 18,				292	00
				<hr/>	12,247 45
Balance of money on hand,					<hr/> <hr/> \$ 587 57

D. J. HARTSOOK, *Treasurer.*

## JACKSON'S RIVER TURNPIKE COMPANY.

JAMES BROWN, JR., *Second Auditor.*

SIR,

I herewith enclose the receipts and disbursements on the Jackson's river turnpike for the year ending 30th September 1851.

Income from travel at gate No. 1,	-	-	688 21 $\frac{1}{2}$
Income from stages at gate No. 1,	449	26	
Deduct from this 20 per cent.	89	80	
	<u>359</u>	<u>46</u>	
			359 46
Total income from gate No. 1,	-	-	<u>\$1,047 67<math>\frac{1}{2}</math></u>
Income from gate No. 2,	-	-	612 74
From stages at gate No. 2,	-	442 00	
Deduct 20 per cent.	-	88 40	
		<u>353 60</u>	
Total income from gate No. 2,	-	-	966 34 $\frac{1}{2}$
Add to this income from gate No 1,	-	-	<u>1,047 67<math>\frac{1}{2}</math></u>
Total income for tolls on road at each gate,	-	-	2,014 02
Deduct expenses as follows :			
To superintendent's salary,	-	300 00	
To toll-gatherer at gate No. 1,	-	90 00	
To toll-gatherer at gate No. 2,	-	75 00	
To repairs on road,	-	421 90	
		<u>886 90</u>	
Balance on hand from the fiscal year ending 30th September 1851,	-	-	1,127 12 $\frac{1}{2}$
To thirty dollars paid William H. Terrell, for services rendered the company as counsel previous to my appointment as superintendent,	-	-	30 00
Balance due Jackson's river turnpike company,	-	-	<u>\$1,097 12<math>\frac{1}{2}</math></u>
Capital stock, \$22,097 85 :			
Net tolls,	-	-	<u>\$1,097 12</u>
Two-fifths, state,	-	438 85	
Two-fifths, individuals,	-	658 27	
		<u>\$1,097 12</u>	

DOUGLAS B. LAYNE, *Sup't.*

## LEESBURG TURNPIKE COMPANY.

*Return of the state of the Leesburg Turnpike Company, for the year ending September 30, 1851.*

Capital subscribed by individuals—I have nothing in my possession, only the printed reports by the state.

Paid by individuals—I have to make the same reference.

Due by individuals—I know of none.

Subscribed and paid by the Board of public works—I do not know, only by reference to same reports.

Receipts during the year, from Sept. 30, 1850, to Sept. 30,

1851,	-	-	-	1,941 44
Paid to Valley Bank at Leesburg,	-	881 67		
Paid president and directors,	-	60 00		
Paid toll-gatherers,	-	185 00		
Paid expenses of the road, (including the amount of judgment against the company, and the am't paid secretary and treasurer,)	-	642 98		
Amount in the hands of treasurer,	-	171 79		
			<u>\$ 1941 44</u>	<u>1941 44</u>

Dividends since the incorporation of the company, sixth July 1847.

Debts due by the company—\$ 3,076 88 to Valley Bank Leesburg.

Debts due to the company—none good that I know of.

Property held by the company—none but the road and toll-houses, and a few tools.

President's salary \$ 30; three directors \$ 15 each.

Joseph Mead, president; George Rhodes, M. S. McPherson and J. J. Coleman, directors.

The road and branch to Middle turnpike is about eighteen miles—finished and in good repair.

Four toll-gates—salary to the toll-gatherers \$ 60 per year.

The road is worked by hired hands—superintendent at a salary of \$170 per year.

S. M. Ross, treasurer, 2½ per cent. for money received.

A map of the road—the company have none made, but have furnished one heretofore.

LEESBURG, Oct. 13, 1851.

W. R. DRINKARD, *Sec'y B. P. W.*

DEAR SIR,

The above is the report of the state of the Leesburg turnpike company for the year ending Sept. 30, 1851—all which is correct and herewith submitted.

Yours, &c.

## LITTLE RIVER TURNPIKE COMPANY.

ALEXANDRIA, VA., 10th mo. 22d, 1851.

W. R. DRINKARD, ESQ.,

*Secretary Board P. Works, Richmond, Va.*

Herewith thou will please receive a copy of the report of the president and directors of the "Little river turnpike company," made to the stockholders in general meeting held in Alexandria on the 9th day of April last; also the report of the president and directors to the Board of public works, made up to the 1st instant; which I hope will prove satisfactory.

The report to the stockholders was approved, and the president, directors and treasurer of the last year were unanimously re-elected. The dividend of two and a half per cent. declared in April last, amounting to \$ 313 75 on the 125½ shares of stock held by the Board of public works, was remitted by our treasurer, W. C. Page, Esq. to the treasurer of the state of Virginia on the 4th of May last.

The next annual meeting of the stockholders will take place in Alexandria on the second Wednesday in April 1852.

Very respectfully, thy friend,

PHINEAS JANNEY,

*Pres't L. R. Turnpike Co.*

The president and directors of the Little river turnpike company respectfully report to the stockholders, in general meeting assembled, that they have examined the superintendent's and treasurer's accounts and vouchers for the past year ending the 31st of March 1851, and ascertained that the tolls received amount to the sum of 10,437 17  
To which add the balance in the hands of the  
treasurer, as per account 4th April 1850, - 1,152 59

Making the sum of - - - 11,589 76

And that there has been expended for the  
last year as follows:

For repairs of the road, including superintendent's salary,	-	-	-	2,974	35
Cash paid for collecting tolls from gate-keepers,	-	-	-	40	00
Cash paid for salaries of all the gate-keepers,	1,550	00			
salary of the president,	-	100	00		
salaries of 4 directors, at \$ 30 each,	-	-	-	120	00



Cash paid for treasurer's commission of $1\frac{1}{2}$		
per cent. on \$ 10,437 17 tolls,	156 55	
dividends, as per treasurer's list,	1,773 99	
state tax from 1843 to 1850, as		
per auditor's receipt,	- 232 52	
E. Snowden's bill for printing		
tickets &c.	- 15 50	
counterfeit note Valley Bank		
Romney, - - -	5 00	
Mr. Clark, for 2 shares of stock		
and balance of dividends,	55 39	
	<hr/>	7,023 30
Leaving in the hands of the treasurer, per his		
account, - - -		4,566 46
To which add $7\frac{1}{2}$ acres of land (Gravel Bank)		
in Fairfax county, worth - -		150 00
		<hr/>
		4,716 46
From which deduct undrawn dividends, -		1,353 86
		<hr/>
		<u>\$ 3,362 60</u>

The president and directors further report to the stockholders, that at a meeting of the board on the 3d inst., they declared a dividend of two and a half per cent. for the past year, payable on the 4th day of the present month, and that due notice has been given in conformity with the charter.

The president and directors have the pleasure of reporting to the stockholders that the road is now in good order, and that no extraordinary outlay will be required unless some unexpected occurrence should happen in the course of the present year.

Since our last annual report a demand has been made upon the company for a tax of one and a half per cent. on the amount of our annual dividends since the passage of the law in 1843. The law had been overlooked, and after examining into the subject, finding that it was our duty to pay the tax according to law, we remitted the sum of two hundred and thirty-two dollars and fifty-two cents to Richmond, as per the auditor's receipt of May 31, 1850, entered in the treasurer's account; and the tax on the dividend of the present year will be remitted in a few days.

All of which is respectfully submitted.

(Signed,)

PHINEAS JANNEY, *President.*  
 HUGH SMITH,  
 ANTHONY CHAS. CAZENOVE,  
 JOHN MOORE,  
 SAMUEL MILLER, *Directors.*

A true copy—Teste,

WASH. C. PAGE, *Treas'r.*

*Alexandria, Va., April 9, 1851.*

...over turnpike company  
...that since their an-  
...on the 9th of April  
...receipts of tolls have

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	4,566 46
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	8,087 53
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3,805 71	
gate	
&c. 1,589 05	
	<hr/>
	5,394 76
	<hr/>
	<u>\$2,692 77</u>

...dividends and materials yet  
...repair.  
...Directors to bring the subject of  
...before the next meeting of  
...of the Board of public works;  
...change being made.  
...completed and so reported, and  
...our books that ever will be col-  
...ends yet uncalled for, we have  
...could interest the Board of pub-  
...good order, and that we intend to

PHINEAS JANNEY, *President.*  
HUGH SMITH,  
A. C. CAZENOVE,  
*Directors.*

WASH. C. PAGE, *Treas'r.*

## LYNCHBURG AND SALEM TURNPIKE COMPANY.

OFFICE LYNCHBURG AND SALEM TURNPIKE CO.

*Lynchburg, Oct. 20, 1851.*

DEAR SIR,

I enclose the annual return of this company, which has been ready since the 1st of the month, except action by the board of directors, who did not meet before this day.

I am, respectfully,

A. TOMPKINS, *Cas.*

JAMES BROWN, JR.

*Second Auditor, Richmond.*

*Return of the state of the Lynchburg and Salem Turnpike Company,  
30th September 1851.*

Capital stock, \$ 110,963 05 :		
Subscribed by individuals		
737 shares, - - -	80,963 05	
Subscribed by common-		
wealth 300 shares, -	30,000 00	
		110,963 05
Tolls received from commencement to date, -		175,252 20
Interest received on money loaned, - -		5 88
Due by company for hire of slaves to keep road in		
repair, - - - - -		1,530 00
Dividends undrawn, - - - -		1,256 00
Expended in constructing road from		
commencement (1818) to date, -	122,411 90	
Expended in repairing road from com-		
menccement (1818) to date, -	44,476 05	
Property now held by company—horses,		
wagons, carts, &c. - -	857 00	
Dividends declared from commence-		
ment to date, - - -	79,691 50	
Taxes paid on dividends from com-		
menccement to date, - -	383 07	
Incidental charges from commencement		
to date, - - - -	758 75	
Salaries from commencement to date,	29,861 97	
Interest paid " "	2,056 66	
Suspended debts—delinquent stock sold		
and purchased by the company, -	5,869 11	
Cash on hand, - - -	2,641 12	
	<u>\$ 289,007 13</u>	<u>289,007 13</u>

*Statement of Receipts and Expenditures during the year.*

Balance money on hand,	-	-	-	-	4,571 62
Tolls received during the year,	-	-	-	-	8,496 48
Interest	"	-	-	-	5 88
Expended in salaries,	-	-	1,713	67	
"    repairs,	-	-	3,188	62	
"    personal property,	-	-	122	00	
"    incidental charges,	-	-	12	32	
"    taxes on dividends,	-	-	87	54	
"    dividends paid,	-	-	5,308	71	
Cash on hand,	-	-	2,641	12	
					<hr/>
					\$ 13,073 98
					<hr/>
					13,072 98

Dividend declared 16th October 1850, \$ 3 on each share.

"           "       11th June 1851, \$ 2 75   "       "

By order of the board.

A. TOMPKINS, *Secretary.*

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At a meeting of the directors of the Lynchburg and Salem turnpike company, on the 20th October 1851, ordered that the above annual return of the company be certified to the Board of public works.

Extract from the minutes.

A. TOMPKINS, *Secretary.*

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## MARTINSBURG AND POTOMAC TURNPIKE COMPANY.

OFFICE OF THE MARTINSBURG AND POTOMAC  
TURNPIKE Co., Oct. 16th 1851.

*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

In pursuance of the 2d section of chapter 72 of the Code of Virginia, I herewith transmit to you the treasurer's account for the past year, with a list of the officers, &c. of the Martinsburg and Potomac turnpike company.

The following extracts from my annual report to the individual stockholders will give you the condition of the work, being now nearly finished:

“That during the past winter some additional shares of stock were obtained by the board, with a view to expend it in capping sections 12 and 13; the amount of stock thus taken being insufficient however to that end, the board determined to apply to that purpose the sum of \$ 503, 50, which was deducted by them from the contract of Massetta & Kyne for a deficiency of metal upon a part of their road; and they believe now, with that sum (if all the stock subscribed shall be secured and paid,) they will be enabled to cap the entire line of road in conformity with the provisions of the charter.”—“Of the contract with Hamilton Downs & Co., there yet remain to be done some 35 rods of capping on section 21, and 240 perches of capping on sections 19 and 20, and some cross gutters to be adjusted.”

“The river division of the road, originally under contract with Jer. Sullivan, and abandoned by him in August 1850, has been under contract for some time to several parties, and is in successful progress towards completion.” From the Potomac river to the bridge (at the Barton house,) a distance of nearly a mile, John Bisom undertook to cap a part thereof at 87½ cents per perch, and a part thereof at \$1 per perch, and also to reduce the grade of the river hill to four degrees, for \$100. He will finish, in accordance with his contracts, in a few weeks.” “The capping of a quarter of a mile from the Barton bridge south is let to Jos. D. Barnes, at \$1 per perch, and the balance of said division to Andrew Criswell and Jacob Ward, at 87½ per perch. Upon the latter three divisions the stone has been delivered upon the road and most of them broken. They will also finish in a few weeks.”

“From an approximate estimate which I have made of this division of the road, (Sullivan’s,) I believe it will be completed for the sum which would have been due to Sullivan had he have finished it under his contract.”—“If so, the stockholders may look with pleasure to the fact, that the entire line of road will be finished in thirty days, within the means of the company, without creating a debt which would have to be extinguished hereafter by its tolls.”

“It also affords me pleasure to report to you that one toll-house has been erected, one mile from Martinsburg, at a cost of \$ 257 09. The company have been receiving tolls since the 6th day of August past.

“Estimating from the tolls received for the first month, to wit, \$ 56, or nearly \$ 2 per day, it may fairly be inferred, that when the road shall be completed, and all the toll-gates established thereon, that the work will pay some dividend to the stockholders.”

Respectfully submitted, by order and on behalf of the board.

DANIEL BURKHART, *Pres’t.*

## OFFICE MARTINSBURG AND POTOMAC TURNPIKE CO.

*Second Annual Report of the Treasurer of the Martinsburg and Potomac Turnpike Company to the President and Directors.*

Balance of money on hand, per last annual report,	-	201	81
Add receipts during the year:			
For capital stock received from individual stockholders,		5,510	00
For capital stock received from Board of public works,		8,265	00
For tolls at one gate for one month,	-	-	56 00
			<hr/>
			14,032 81

## Deduct disbursements during the year :

Paid contractors for construction of road,	13,019	80	
Paid superintendent of construction,	100	00	
Paid Hunter & Hoge, attorneys,	-	10	00
Paid Valley Bank interest on requisition			
on Board of public works	-	8	66
Paid for building toll house, posts &c.	-	257	09
Paid for advertising and contingencies,	-	28	25
Paid for repairs,	-	17	06
			<hr/>
			13,440 86
			<hr/>
Balance on hand,	-	-	\$ 591 95
			<hr/>

By order of the president and directors.

JOHN H. LIKENS, *Clerk.*

- 
1. A list of private stockholders has been furnished.
  2. A complete map of the improvement has been furnished.
  3. Length of improvement twelve miles finished—and half mile to finish.
  4. Mode of keeping in repair—employment of day laborers at 87½ cents per day.
  5. The average cost per mile cannot now be ascertained.
  6. A list of every officer or agent of the company, to wit: Daniel Burkhart, president—no salary; John H. Likens, Charles Downs, James L. Cunningham, directors appointed by the Board of public works; Henry Harris, director, elected by private stockholders; Allen C. Hammond, director appointed by president and directors, in place of Edward Colston, Esq. dec'd; John H. Likens, treasurer—no salary; John H. Likens, clerk—no salary; Daniel Burkhart, superintendent of construction—salary \$150 per annum; Robert Kane, gate-keeper—salary \$100 per annum.

JOHN H. LIKENS, *Clerk.*

# MARTINSBURG AND WINCHESTER TURNPIKE COMPANY.

MARTINSBURG, VA., 20th Nov. 1851.

DEAR SIR,

I herewith transmit a statement of the Martinsburg and Winchester turnpike company for the year ending 30th September 1851. It should have been made earlier, but I have not been able to get the board together for the last two months until a few days since.

Your circular calls for :

1. A list of private stockholders, which you have enclosed.
2. A map of the improvement—also enclosed.
3. Length of improvement 12 miles ; all finished with the exception of 3 or 4 miles yet to dress up and have a very light covering of earth put on it.
4. Mode of keeping in repair : Three of the directors, Messrs. Snodgrass, Peters and Matheys, live directly on the road and at convenient distances apart, to take charge of it ; and they agree to superintend the repairs of the four miles each (which covers the whole length of the improvement) without any other compensation than the use of the road free of toll.

5th. Average cost per mile, \$2,306 67.

List of officers—(The president, C. J. Faulkner, resigned ;) Wm. T. Snodgrass, president pro. tem., no compensation ; George Doll, jr. treasurer and clerk, no compensation ; Joseph Hoffman, collector of tolls, gate No. 1, \$100 per annum ; John Miller, collector of tolls, gate No. 3, \$100 per annum. The gate-keepers furnish their own houses.

Respectfully,

GEORGE DOLL, JR., *Clerk.*

W. R. DRINKARD, ESQ., *Sec'y. B. P. W.*

## *Return of the state of the Martinsburg and Winchester Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$28,450.

Subscribed by individuals 455 shares, at \$25,	-	11,375 00
Subscribed by the commonwealth 683 shares, at		
\$25,	-	17,075 00
Amount of commonwealth's subscription unpaid,	1,305 00	
Amount of individual subscription unpaid,	866 63	

Expended in construction of the work from the commencement, April 1850, viz :

Paid John P. Kearfott, engineer and superintendent of construction	-	-	220 00
Paid George A. Porterfield, assistant engineer,			50 00
Paid chain carriers, rodmen and pin drivers, in locating,	-	-	74 30
Paid Francis Peters, for removing fences,			55 90
Paid Archibald Lamar, for removing fences,			37 50
Paid Wm. T. Snodgrass, for removing fences on Brown's land,	-	-	24 75
Paid Virginia Republican, for advertising,			12 50
Paid Martinsburg Gazette, for advertising and printing blanks,	-	-	24 75
Paid for blank books,	-	-	1 12
Paid interest to Bank of the Valley June 12, 1850,	-	-	8 50
Paid for blank certificates of stock,	-	-	5 00
Paid for corporate seal,	-	-	6 00

Amount Jerry Sullivan's contract for 12 miles of road,	-	27,680 00
From which deduct for 24 rods, (short of 12 miles,) -	-	172 00

\$ 27,508 00

Paid Jerry Sullivan, on account contract,	25,396 00
Dennis Kavanagh's contract for dressing up and earthing 11 miles of road,	-
	\$ 539 00
Paid Dennis Kavanagh, on account his contract,	312 31
Balance of money on hand,	-
	63 66

\$ 28,450 00 28,450 00

By order of the board of president and directors.

GEORGE DOLL, JR., *Clerk.*



## MIDDLE TURNPIKE COMPANY.

*Return of the state of the Middle Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$60,000 :			
Subscribed and paid by individuals, and the common council of Alexandria,	36,100	00	
By the Board of public works,	23,900	00	
	<u>\$60,000</u>	<u>00</u>	
Amount received from lottery funds to date—lottery authorized by congress, - -			
			28,200 00
Amount received from tolls from the commencement to date, - - - -			
			13,180 81
			<u>\$101,380 81</u>

## Receipts :

Balance on hand, per last report, - -	339	95	
Tolls received, - -	662	98	
			<u>\$1,002 88</u>

## Expenses :

Repairs on the road,	301	30	
Salaries and incidental charges,	386	98	
Balance, - -	314	60	
			<u>\$1,002 88</u>

The road is seventeen miles long. There are three gate-keepers, who receive a compensation of \$75 a year each.

The president, who acts as treasurer, receives a salary of \$100 per annum.

The company owes about \$200 for repairs now in progress on the road, and materials furnished.

The president and directors for the year ensuing are as follow : Cassius F. Lee, president ; Robert Brockett, Francis L. Smith, Benjamin Waters, directors by the stockholders ; Wm. H. Miller, Daniel Minor, directors by the Board of public works.

A list of stockholders on the 30th September is hereto annexed.

CASSIUS F. LEE.  
Pres. Middle T. Co.

# THE TURNPIKE COMPANY.

The directors of the Millboro' Turnpike Company submit the following as their report for the year ending the 1st of October 1851, is in good state of repair; it has for the year past cost of labor at two hundred dollars and has improved its condition, notwithstanding the expense has been gradually increasing. The amount of tolls received the 1st of October 1851, is five hundred and seventy-seven cents. The amount of disbursements are five hundred and ninety-six dollars and seventy-seven cents, leaving a balance in the treasury of one hundred and ninety-two cents.

JAMES F. HARPER, *President.*

## Millboro' and Carr's Creek Turnpike Company ending October 1st, 1851.

The company has 100 shares, expended in the construction

Balance 1st. 1850,	-	-	438 77
Amount received for present year,	-	-	376 00
			<u>\$814 77</u>

Amount paid to Commonwealth,	-	210 00	
Amount paid to individuals,	-	126 00	
Amount paid for road,	-	200 00	
Amount paid for fuel,	-	60 85	
Amount paid for repairs,	-	102 00	
Amount paid for other purposes below,	-	115 92	
		<u>\$814 77</u>	

## Receipts and Expenditures within the year.

Amount of cash on hand. per last report,	-	-	438 77
Amount received October 1st, 1851,	-	-	376 00
			<u>814 77</u>

Amount of cash on hand,	-	-	200 00
Amount of cash on hand,	-	-	210 00

Dividends paid individuals, - - -	126 00	
Officers' per diem allowance, - - -	31 00	
Incidental expenses—treasurer and secretary, - - -	29 85	
	<hr/>	596 85
Balance on hand, - - -		217 92
But subject to unpaid dividends, - - -		102 00
		<hr/>
Exact balance on hand, - - -		\$ 115 92

*E. E.*

JACOB M. RUFF,  
*Treas. and Sec. of M. and C. C. T. Co.*

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The length of this improvement is ten miles, costing \$5,000 in its construction.

For several years it has been kept in repair by contract, at \$200 per year.

The toll collector receives in compensation for his services, 15 per cent. upon the amount of tolls collected.

The president and directors receive \$2 per day when in the service of the company.

The treasurer receives 3 per cent. on the nett amount of receipts for his services as treasurer and secretary.

JACOB M. RUFF,  
*Secretary of M. and K. C. T. Co.*

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## MOORFIELD AND ALLEGHANY TURNPIKE COMPANY.

OFFICE MOORFIELD AND ALLEGHANY TURNPIKE Co.  
October 27, 1851.

*To the Board of Public Works.*

GENTLEMEN,

I send you herewith enclosed, the annual report of the president and directors of the Moorfield and Alleghany turnpike company, made to your board. If anything more should be required, please inform me, and it shall be furnished.

Yours, very respectfully,

THO'S MASLIN, *Pres't.*

At a meeting of the president and directors of the Moorfield and Alleghany turnpike company, held at the office of said company in Moorfield on Friday, the 24th day of October 1851 :

Present—Thomas Maslin, president ; David Vanmeter, James S. Miles, Samuel Babb and Abraham A. Inskeep, directors.

The said president and directors make the following (with the papers herewith sent, marked A, B, C and D,) as their report to the Board of public works of the “ progress and condition of their work ” on the 30th day of September 1851 :

The road was located in the summer of 1849, and a contract made with Job Sions for the construction thereof, as stated in the last annual report of the said president and directors.

The number of shares of stock subscribed for by individuals, and by the Board of public works, are also stated in said report. You were also furnished at the same time with a list of the stockholders ; and as the stock was all taken at that time that was authorized by law, it now seems unnecessary that we should furnish another list.

No part of said road is yet fully completed, but it is now confidently expected that the whole line will be ready for toll during the month of November.

The amount received by the treasurer on account of individual stock during the year is \$ 1391, and from the Board of public works \$ 4748 79 ; also received for interest on stock the sum of \$ 15 23. There is yet to be received from individual stockholders the sum of \$ 716 50, and from the Board of public works the sum of \$ 1161 21. The amount expended the present year for construction is \$ 4502 90, and for other expenditures (as set forth in schedule A,) the sum of \$ 249 06, leaving in the hands of the treasurer the sum of \$ 1403 06.

The work, as far as done, has been inspected from time to time by the engineer of the company, and estimates thereof made by said engineer, and 20 per cent. thereon retained as security for its completion.

As no part of said road is fully completed, no tolls have been demanded and no toll-gates or houses yet erected, although the road is in such a state as to be of much benefit to the public. It is now doubtful whether there will be a sufficient amount collected from the stockholders to pay for the construction of the road, and certainly not enough to pay for the erection of toll-houses. The directors will therefore be compelled to rent houses on the road and establish temporary gates until an increase of the capital stock can be obtained from the legislature.

The company own no property, and have nothing due them except for stock in the road.

The officers of the company are the same as last year, viz : Thomas Maslin, president ; A. A. Inskeep, Solomon Michael, Sam'l Babb, David Vanmeter and James S. Miles, directors ; Charles Lobb, clerk ; S. A. McMcchen, treasurer ; M. S. Lovett, engineer. The president, directors and clerk have thus far made no charge for their services. The treasurer is allowed \$ 20 per annum, and the engineer \$ 5 per day. We have not as yet employed a superintendent, and will not until the road is completed.

The stem of said road to Petersburg was let for construction to Job Sions, as you were informed in our last annual report, and portions of it were relet by said Sions to Smith & Athey and to Ridgway & Brother, and was completed in the month of February last. The directors rented a house and established a gate near the town of Petersburg, and commenced taking toll about the 1st of March. Henry Tholacre was appointed gate-keeper, and receives for his services 10 per cent. upon the amount of tolls collected. Job Welton was appointed superintendent, and for his services he and his family are to travel the stem free of toll. The stem when located and let for construction was 12 miles 140 poles long, but by a change in the location of the main road the stem was shortened 168 poles, making the distance when completed 11 miles 292 poles; which change caused a difficulty in our settlement with Ridgway & Brother, one of the subcontractors, (who by an arrangement between the parties were to draw their own pay,) they claiming pay for the original distance. The board of directors refused to pay them, and filed a bill of interpleader, and paid the amount into court, which now awaits its decision.

For the construction of the stem the president of the company received from the Board of public works the sum of \$4500, and has paid out for construction, &c. (as set forth in schedule marked C,) the sum of \$3792 58, and paid into court, as stated above, the sum of \$627 35, leaving a balance in his hands of \$80 07, which the directors (with the balance of the fund paid into court, if any,) intend to appropriate towards building a toll-house.

The superintendent has received from the gate-keeper on the stem, for tolls to 1st September, the sum of \$82 19, and has expended in repairs \$72 13, leaving in his hands \$10 06, as per schedule marked D.

THO'S MASLIN, *Pres't*  
M. & A. T. Co.

CHA'S LOBB, *Clerk.*

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[ A. ]

*Statement of the Receipts and Expenditures of the Moorfield and Alleghany Turnpike Company for the year ending 30th September 1851.*

By amount received from individuals on account of stock,	1,391 00
By amount received from Board of public works on account of stock,	4,748 79
By amount received from interest on stock,	15 23
To amount due treasurer, per last annual report,	15 80
To amount paid land damages,	60 00
To amount paid sheriffs' fees,	1 40
To amount paid clerks' fees,	17 98
To amount paid for printing,	13 75

To amount paid M. S. Lovett, engineer,	100 00	
To amount paid S. A. McMechen, treasurer,	40 00	
To amount paid postage,	13	
To amount paid Job Sions—several sub-contractors on account of construction,	4,502 90	
Balance in treasurer's hands, September 30th, 1851,	1,403 06	
	<u>\$6,155 02</u>	<u>6,105 02</u>

1851.  
Sept. 30. Balance in treasurer's hands, brought down, \$1,403 00

THOS. MASLIN,  
President M. & A. T. Co.

[ B. ]

*Return of state of the Moorfield and Alleghany Turnpike Company  
from the commencement to the 30th September 1851.*

Capital stock, \$15,000:		
Subscribed by individuals 120 shares, at \$50 each,		6,000 00
Subscribed by the commonwealth 180 shares, at \$50 each,		9,000 00
Amount of commonwealth's subscription unpaid,	1,161 21	
Amount of individual subscriptions unpaid,	716 50	
Amount paid on account of expenses of location and engineer's services,	284 50	
Amount paid for land damages,	393 55	
Amount paid for printing and stationery,	32 00	
Amount paid for clerks' and sheriffs' fees,	19 51	
Amount paid treasurer,	40 00	
Amount paid Job Sions, the contractor, and his several sub-contractors,	10,964 90	
Cash in treasurer's hands,	1,403 06	15 23
By amount received for interest on stock,		
	<u>\$15,015 23</u>	<u>15,015 23</u>

1851.  
Sept. 30. Balance in treasurer's hands, \$1,403 00

THOS. MASLIN,  
President M. & A. T. Co.

## [ C. ]

*Return of the state of the Petersburg Stem to the Moorfield and Alleghany Turnpike from the commencement to the 30th Sept. 1851.*

By amount received by the president from the Board of public works,		4,500 00
To amount paid expenses of location, including services of engineer,	93 00	
To amount paid for land damages,	29 00	
To amount paid on account of construction,	3,572 65	
To amount paid for building bridge in town of Petersburg,	13 00	
To amount paid for mile posts,	12 00	
To amount paid for toll-gate and fixtures,	8 00	
To amount paid for printing rates of toll,	3 00	
To amount paid for attorneys' fees and advice,	38 75	
To amount paid costs of suit with Ridgway and others,	23 18	
To amount paid into court on bill of interpleader, being the balance supposed to be due Ridgway & Bro., sub-contractors,	450 05	
To amount paid into court on same as above, being the amount claimed by Ridgway & Bro., in addition to the above sum of \$ 450 05,	177 30	
To balance in the president's hands Sept. 30, 1851,	80 07	
	<u>\$ 4,500 00</u>	<u>4,500 00</u>

THOS. MASLIN, *President.*

## [ D. ]

*Return of Job Welton, Superintendent of the Petersburg Stem, to 30th September 1851.*

By amount received from gate-keeper, for tolls for quarter ending 1st June 1851,	-	-	45	55
By amount received from same, for tolls for quarter ending the 1st September,	-	-	36	64
To amount expended for repairs from 1st March to 30th September,	-	-	72	13
To balance in the hands of the superintendent,			10	06
			<u>\$82</u>	<u>19</u>
			<u>82</u>	<u>19</u>

JOB WELTON, *Superintendent.*

## MORGANTOWN AND BRIDGPORT TURNPIKE COMPANY.

FAIRMONT, VA., Nov. 7, 1851.

DEAR SIR,

I herewith enclose you the annual return of the Morgantown and Bridgport turnpike company, and also a list of forty shares of additional stock subscribed, on which I am directed to ask that the corresponding number of shares be subscribed by the Board of public works on behalf the state under the act of last session. It is desired that the subscription be made immediately.

Respectfully, yours, &c.

THOS. G. WATSON,

*Sec'y and Treas'r M. & B. T. Co.*

*Secretary Board P. Works, Richmond, Va.*

*Return of the state of the Morgantown and Bridgport Turnpike Company for the year ending 30th September 1851.*

Capital stock subscribed, \$ 11,725 :	
Subscribed by individuals 199 shares, at \$ 25 each,	4,975 00
Subscribed by commonwealth 270 shares, at \$ 28 each,	6,750 00
Tolls received from commencement,	164 15



Interest received of stockholders, -		3 37
Amount commonwealth's subscription unpaid, - - - -	150 00	
Amount individual subscription unpaid,	556 50	
Expended in construction of work from commencement to date, including offi- cers' salaries, location, &c. -	10,152 05	
Expended in land damages, - -	751 00	
in repairs, - -	7 50	
Cash on hand 30th Sept. 1851, as per statement below, - - -	275 47	
	<u>\$ 11,892 52</u>	<u>11,892 52</u>

*Statement of Disbursements during the year.*

Balance on hand, per last annual report,	465 57	
Receipts during the year:		
For capital stock of individuals, -	2,011 25	
For capital stock of Board of public works, - - - -	3,000 00	
Tolls received during the year, -	164 15	
Interest received from individual stock- holders, - - - -	3 37	
	<u>5,644 34</u>	
Deduct disbursements:		
For construction, - - - -	4,239 98	
Officers' salaries—superintendent, inclu- ding last year's wages, &c. -	446 39	
Treasurer's commission, - -	125 00	
Damages, - - - -	545 00	
Repairs \$ 7 50 ; postage \$ 5, -	12 50	
	<u>5,368 87</u>	
Amount on hand 30th Sept. 1851,		<u>\$ 275 47</u>

By the above the Board of public works will perceive the financial condition of this company on the 30th September 1851. This board takes great pleasure in announcing that the entire road is nearly completed. That part from Morgantown to Bridgport in a few days will be finished. The road is well made and of great utility, passing through one of the finest portions of the Monongahela valley. It is encouraging to see the marks of improvement already commenced in the farms, dwellings and buildings of every kind, shewing clearly the good effects of a good road in the country through which it passes. We hope at an early period of the ensuing year to have the entire road, including that in the first and amended charter, completed, which is

above fifty miles. We have been a little pressed for funds, but the farmers on the line of the road have come nobly to the rescue with their money.

F. H. PEIRPOINT, *President.*

THOS. G. WATSON, *Secretary.*

## NEWMARKET AND SPERRYVILLE TURNPIKE COMPANY.

*Return of the state of the Newmarket and Sperryville Turnpike Company for the year ending 30th September 1851.*

Whole capital stock authorized by law, \$ 115,000 :			
Subscribed by individuals 1640 shares, at \$ 25 each,		41,000	00
“ commonwealth, 2460 “ “		61,500	00
Expended from commencement (1849) to date, viz:			
Grading and metaling 30½			
miles road, - -	86,644	92	
Smith's creek bridge, -	2,324	50	
Shenandoah “ -	9,759	50	
Hawk's Bill “ -	2,266	08	
			100,995 00
Land damages, - -	3,200	00	
Survey and location, -	300	00	
Officers' salaries, -	3,000	00	
Expenses of directory, -	150	00	
Stationery and printing, -	155	00	
Incidental expenses, -	18	23½	
			6,823 23½
Total expenditure,			107,818 23½
Cash on hand 30th September, as per statement below, - -			611 80½
Nett balance due by company to date,			8,930 04
			<u>\$ 108,430 04</u>
			<u>108,430 04</u>

### *Statement of Receipts and Expenditures.*

Balance of money on hand, per last annual report, - - -	11,522	79
Add receipts from all sources during the year, - - -	90,977	21
		<u>102,500 00</u>
Total receipts,		
Deduct disbursements during the year, viz :		
Construction, - - -	82,549	57½

Officers' salaries,	-	-	-	1,500	00
Land damages,	-	-	-	975	00
Expenses of directory,	-	-	-	80	50
Disbursements of the year, per last annual report,	-	-	-	16,783	12
Total disbursements,				<u>101,888</u>	<u>19<math>\frac{1}{2}</math></u>
Balance of money on hand,					<u>\$ 611 80<math>\frac{3}{4}</math></u>

By order of the board of president and directors.

F. H. JORDAN,  
Clerk N. M. and S. V. T. Co.

### NORTH BRANCH TURNPIKE COMPANY.

*To the Board P. Works of Va. and the  
Stockholders Moorfield & North Branch T. Co.*

The president and directors of the Moorfield and North Branch turnpike company report to the Board of public works and stockholders, that since their last annual report of the state and condition of this improvement, the then unfinished portion of the road from North's mill or upper tract to Franklin has been nearly completed. Eight miles of it have been under toll since about 1st July—the remainder, five and a quarter miles, it is expected will be finished by 1st November. All the balance, viz: from North's mill or upper tract to the north branch of Potomac has been completed and under toll since the 1st of January of the present year. The road is now in beautiful order for travel and transportation, and is found to be of great utility. Much difficulty has been encountered in securing the completion by the contractors of that part of their road from North's mill to Franklin in the manner they contracted.

The time in which they contracted to finish the work has long since elapsed, but it was deemed most expedient to extend the period of its completion until 1st November next, rather than enter into any new contracts. The road being as yet new, and the side cuts being numerous, and in some places very deep, it was soon necessary to incur a large expenditure of money to remove the obstructions incident to a new road and to keep it in good traveling condition. These difficulties are lessening daily, and for the future the board hopes to be able to report a steady increase of tolls sufficient to keep in good condition and to pay all necessary expenses incurred in its supervision. The amount of tolls received on the finished portions from the 1st January to the 30th September is \$1,326 77, (exclusive of salaries to gate

keepers) which has been applied to the repair of the road, the purchase of requisite implements and the salary of superintendents. The total expenditure from the commencement of the work for every object has been \$46,844 29. The entire length of the road is 84 miles, the average, therefore, including all costs of every description to the present time in the construction of their road, has been \$557 66 per mile. It is not improbable but this improvement (which is of great value to this valley,) may in the course of a few years yield a dividend of toll beyond its expenses; but even if it should not furnish to the stockholders and state a dividend equal to the interest of the money expended in its construction, they will be amply remunerated, by the increased value given to their property, the impulse to business and all the substantial benefits which such an improvement is calculated to confer upon all who live within its reach. Accompanying this report will be found the treasurer's report, shewing the particular items of expenditure, and the present condition of its finances.

Daniel R. McNeill is president of the company; Samuel H. Alexander, treasurer; N. Kuykendall, superintendent and clerk; William McCoy and F. R. Seymour, directors on the part of the stockholders; G. D. Barbee, Doct. J. W. Moore, and William P. Stump, directors on the part of the state. N. Kuykendall receives a salary of \$300 per annum; the treasurer receives a compensation of one per cent. upon the expenditure of last year. No other officers of the company (except the gate keepers) have made any charge for their services; the compensation to the gate-keepers is ten per cent. (except two of them;) they receive each five dollars per month.

By order of the board.

DANIEL R. McNEILL, *President.*

Attest,

N. KUYKENDALL, *Clerk.*

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*Return of the Moorfield and North Branch Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$55,500 :

Subscribed by individuals 376 shares, at \$ 50,	18,800 00
Subscribed by commonwealth 564 shares, at \$ 50,	28,200 00
	<hr/>
	\$ 47,000 00

Receipts :

From individual stockholders from 30th Sept.	
1850 to 30th Sept. 1851,	- 3,597 29
From commonwealth from 30th Sept. 1850	
to 30th Sept. 1851,	- 10,076 12
Due from individual stockholders,	330 92
Due from commonwealth,	- 499 14

Disbursements since 30th Sept. 1850, viz :

In construction, building bridges, finishing, superintendent's salary, &c.	-	12,156 19
Land damages,	-	573 00
Sheriffs' and clerks' fees,	-	87 64
Attorneys' fees,	-	75 00
Miscellaneous expenses,	-	25 77
Amount retained, per error against myself on amount reported as received from state last year,	-	60 76
Due from stockholders and commonwealth,		830 06
Balance in hands of treasurer,	-	695 06
		<hr/>
		\$ 14,503 47 14,503 47

In addition to the above the superintendent reports as received for tolls (exclusive of salaries of gate keepers,) the sum of \$ 1,326 77 from the 1st January 1851 to the 30th September 1851, and that he has paid out for repairs, purchase of materials, his salary, &c., the sum of \$ 1,350 15, leaving a balance due him of \$ 23 38. There is due also to the contractor, for the construction of the road from North's mill to Franklin, \$ 1,285. To meet this the company have in the hands of their treasurer the sum of \$ 695 05; and there is due from stockholders, supposed to be good, the sum of \$ 93 11, and from the state, as its proportion of this amount, the sum of \$ 139 66, making a total of \$ 927 82, which leaves a deficiency of \$ 357 16.

SAML. H. ALEXANDER, *Treas'r,*  
M. & N. B. T. Co.

October 23, 1851.

## NORTH FREDERICK TURNPIKE COMPANY.

WINCHESTER, Nov. 4, 1851.

W. R. DRINKARD, Esq.

*Secretary of B. P. W., Richmond, Va.*

SIR,

The cause of delay in this report has been the very late date of the receipt of your circular, it not having been received until late in October. Annexed we hand you a short statement of the financial state of the road. The road is progressing rapidly in being constructed. The road is in that condition that a more full report cannot be made at present. As the entire survey is not complete we are unable to furnish a map at present, but hope to do so shortly. A list of private stockholders accompanied our draft in June last, to which we refer you.

Your obedient servant,

J. MILTON BAKER, *Clerk.*

Return of the state of the North Frederick Turnpike Company to November 1st, 1851.

Capital stock, \$ 13,000 :			
Subscribed by individuals 208 shares, at \$25 each,	-	5,200	00
“ commonwealth 312 “ “	-	7,800	00
Due by company for money borrowed, viz :			
To banks,	-	1,300	00
“ individuals,	-	1,618	31
Amount of commonwealth's subscription unpaid,	-	4,684	50
Amount of individual subscription unpaid,	-	511	00
Expended in construction of work from commencement, March to Nov. 1, 1851 :			
For grading, macadamizing, planking, &c.	10,682	81	
Land damages,	-	40	00
	<u>\$ 15,918</u>	<u>31</u>	<u>15,918 31</u>

By order of the Board of president and directors.

J. MILTON BAKER, *Clerk.*

## PITTSYLVANIA AND LYNCHBURG TURNPIKE COMPANY.

LYNCHBURG, 22d Oct., 1851.

J. BROWN, JR., *Second Auditor.*

SIR,

I send herewith the report of our secretary and treasurer, shewing the situation of our company for the year ending on the 30th of last month. The business of our road has gone on so much in the ordinary course as to make it unnecessary to make any further remark.

After the adoption of the report the board of directors proceeded to declare a dividend of three dollars per share on the stock of the company payable on the — day of next month, subject to a deduction of the amount of state tax on it. They also directed the deficiency of the capital stock that appears in the report to be made up out of the money on hand. The deficiency of \$53 on the part of the state will of course, I suppose, be deducted from her portion of the dividend.

Very respectfully, your ob't serv't,

HENRY DAVIS,  
*President of P. and L. T. Co.*

*Return of the state of the Pittsylvania and Lynchburg Turnpike Company  
for the year ending 30th September 1851.*

Capital stock, \$ 17,500 :		
Subscribed by individuals 210 shares, at		
\$ 50 each, - - - -		10,500 00
Subscribed by commonwealth 144 shares,		
at \$ 50 each, - - - -		7,000 00
Tolls from commencement work to date,		25,298 27
Due by the company—money borrowed &c., viz :		
To toll keepers and road contractors, -	657 80	
Dividends remaining unpaid :		
Amount commonwealth's subscription		
unpaid, - - - -	53 00	
Amount individual subscription unpaid,	79 50	
Due to company other than on account of stock :		
On bond or note, nothing.		
On open account, - - - -	29 95	
Expended in construction of work from commencement of same to this date, viz :		
Purchase of old bridge site over Staunton river, and rebuilding the same, -	9,568 91	

Building bridge over Child's creek, -	600 00	
Building road, - - -	10,451 75	
Damages on land, - - -	593 89	
Purchase of lots and building toll houses,	469 11	
Incidental expenses, - - -	1,233 37	
Expended in repairs for the same period, viz :		
Repairs to road and bridge, - -	11,049 83	
Toll-keepers' salaries, - -	5,984 33	
Officers' salaries, - - -	2,134 70	
Property now held by company, viz :		
Bank and other stocks, nothing.		
Negroes, real estate and other property, nothing.		
Dividends declared from commencement, nothing.		
Cash on hand 30th Sept. 1851, as below,	1,207 73	
	<u>\$ 43,456 07</u>	<u>43,456 07</u>

*Receipts and Expenditures for the year.*

Balance of money on hand, per last report,	302 53	
Amount of tolls received, - - -	2,276 83	
	<u>2,579 36</u>	
Disbursements within the year, viz :		
For repairs, - - - -	315 58	
Paid officers' salaries, - - -	210 05	
Paid toll-keepers' salaries, - -	176 61	
Debts paid, \$ 657 80 ; interest paid, \$ 11 59,	669 39	
	<u>1,371 63</u>	
Balance on hand, - - -	<u>\$ 1,207 73</u>	

By order of the president and directors,

F. S. MILLER, *Sec'y and Treas'r.*

Length of road 25 $\frac{1}{2}$  miles ; 3 toll-gates, including toll-bridge over Staunton river. Compensation to toll keepers : John Roach, at toll-bridge, salary \$ 150 ; Howell Robinson, second toll-gate, \$ 125 ; Nuby Johnson, first toll-gate, \$ 140. The road is let to the lowest bidder for repairs. W. B. Morriss takes one-half the road, at \$ 200, and Jesse M. Goodman the remaining half, at \$ 200.

Henry Davis, Esq., president, and S. Nowlin, D. J. Warwick, Jas.



C. Hunt, M. C. Newhall, Samuel M. Corkle, H. Dunnington and F. S. Miller, directors. F. S. Miller, secretary and treasurer—his compensation 4 per cent. on amount collected. Samuel Nowlin superintendent, compensation \$ 150 per annum.

F. S. MILLER, *Sec'y and Treas'r.*

## RED AND BLUE SULPHUR TURNPIKE COMPANY.

*A return of the state of the Red and Blue Sulphur Turnpike Company for the year ending 30th September 1851.*

Capital stock of said road :

Amount subscribed by individuals,	-	-	-	7,500	00
Amount subscribed by state,	-	-	5,000	00	
Amount subscribed by individuals, additional subscription,	-	-	-	3,685	00
Amount subscribed by state, additional subscription,	-	-	-	2,456	66
				<u>\$ 7,456</u>	<u>66</u>
					<u>11,185 00</u>

The road commences at Red Sulphur springs, and terminates at Blue Sulphur; length 32 $\frac{3}{4}$  miles, on which there are three toll-gates. The road is kept up by hands and teams hired by the company and paid by the day.

*Statement of Receipts and Disbursements of the Road for the year ending 30th of September 1851.*

Amount on hand at the last annual report, nothing.

Amount received this year at Neil's gate,	-	223	70
Amount received this year at middle gate,	-	15	82
Amount received this year at Muddy creek gate,		120	87
		<u>360</u>	<u>39</u>

CR.

By amount paid acc't for work at Neil's,	-	275	95
By com'n for collecting tolls at Neil's,	-	22	74
By amount paid for work and com'n at middle gate,	-	86	31
By amount paid for work and com'n at Muddy creek,	-	128	94
		<u>508</u>	<u>94</u>

Deficiency for the last year, \$ 148 55

No dividends have ever been declared on this road, and I do not think ever will be.

An appropriation was made last year by the legislature of fourteen hundred dollars to pay the outstanding debts of the company, build a bridge across Indian creek, and repair the road. The debts have been paid out of that sum; the bridge is under construction, and the road repairing, which, when completed, will consume the amount.

Yours, very respectfully,

ALEX'R DUNLAP, *Treasurer.*

*List of Officers in the Red and Blue Sulphur Turnpike Company.*

Addison Dunlap, president; Alex'r Dunlap, secretary and treasurer; Jeremiah Tracy, Wilson Lively, state directors; Ja's M. Haynes, Jos. R. Hill, William Ellis, company directors.

ROCKYMOUNT TURNPIKE COMPANY.

OFFICE ROCKYMOUNT TURNPIKE CO.  
Lynchburg, Oct. 18th, 1851.

JAMES BROWN, JR., *Second Auditor.*

SIR,

I hand, enclosed, the annual return of the company; a report of the president and directors, shewing the progress and condition of the work; a list of the stockholders, shewing the amount due from each stockholder; and also the amount due from the state.

Hoping that all will be found correct and satisfactory,

I am, respectfully,

Your ob't serv't,

STEPHEN C. HURT, *Treas.*

OFFICE OF THE ROCKYMOUNT TURNPIKE CO.  
October 1851.

JAMES BROWN, JR., *Second Auditor.*

SIR,

The statement of the treasurer, herewith submitted, will shew the condition of the financial affairs of the company on the 30th September last.

completed to Rockymount, a distance of fifty  
with a few exceptions, in fine condition. Many of  
the soil was bad have been paved and otherwise  
force now on the road is still employed in that bu-  
hope to have and keep it in such condition as even  
months to justify us requiring toll all the time.

to state, in consequence of the modification of the  
charter which confined us to the expenditure of a  
east of Floyd courthouse—passed by the last legis-  
lature allows us to expend a sufficient amount out of the ca-  
pital of our company east of Floyd courthouse, to complete  
the of our road from Rockymount with the mountain sec-  
tions heretofore made. Crossing the Alleghany mountain,  
we enabled to procure the necessary subscription from pri-  
vate individuals, with the state's quota, to put the road under con-  
struction survey and location having heretofore been made by the  
of our company. It was deemed advisable to let this road  
for its location, and a committee was appointed for that pur-  
pose and has entered into contracts for its construction, subject to  
the approval of the board, on terms regarded as favorable, and to be  
completed during the ensuing year.

I am sanguine in my anticipations as to the important benefits that  
will accrue in the tolls on our road, as well as the great accommoda-  
tion it will afford the travel from that distant portion of our state west  
of the mountains, by this connection. Our road will connect, when  
this gap of fourteen miles is completed, at its western terminus with  
the turnpike made on state account, passing on by Floyd courthouse  
to Hillsville in Carroll county, affording all that heretofore unfavored  
section of country a continuous turnpike to Lynchburg, their favorite  
and main market.

I am sorry to state that our company has been unable to meet its  
obligations to the contractors for the construction of our road under  
the last contract, extending to Rockymount, promptly. The exact  
amount of their claims not yet ascertained. There is, however, a con-  
siderable balance due the company from private stockholders, and also  
from the commonwealth, which, when collected and applied, will, it is  
hoped, reduce the amount of the company's liabilities to an amount  
that can be paid out of the tolls, after deducting the current expenses  
of keeping the road in order, &c.

Very respectfully,

PLEASANT PRESTON, *Pres't*  
*Rockymount Turnpike Co.*

*Return of the state of the Rockymount Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$ 31,875 :		
Subscribed by individuals 516 shares, at \$25 each,		12,900 00
Subscribed by commonwealth 789 shares, at \$25 each,		18,975 00
Due by the company :		
M. B. Nowlin, contractor, for estimates unpaid,	-	3,369 07
Toll account—for the whole amount of tolls collected to this date, -	-	1,691 24
Citizen's savings bank, for this sum borrowed of them to pay contractor, -	-	5,000 00
L. H. Brown, balance due him, -	-	10 50
Amount commonwealth's subscription unpaid, -	2,500 25	
Amount of individual subscription unpaid, -	1,419 00	
Expended in construction of the road from commencement to this date, viz :		
For construction of the road,	26,045 43	
Repairs of road, -	880 02	
Paid for two mules, one cart, and other tools now used by hands to keep the road in repair, -	250 00	
Paid J. W. Dudley, former treasurer, amount his salary, being 3½ per cent. on \$27,641 87, collected and disbursed by him, -	961 15	
Paid toll-gatherers their salaries up to this date, -	328 42	
Paid interest on money borrowed of the Citizen's savings bank, &c. -	177 48	
Insurance on bridges, -	34 25	
Clerk's and sheriff's tickets for summoning juries to assess damages for right of way, &c. -	57 82	
Incidental expenses, viz : printing blanks, advertising, blank books, &c.	181 03	
Engineer's expenses in surveys, locations, superintendence of construction, &c.	3,999 23	
Nowlin and Moseley,	8,433 55	
[The above amount appears to be due from them by the books, they having estimates to come in, it having been impossible to get a settlement of their account.]		
Land damages from commencement to this date, -	1,125 91	
Cash on hand, as per statement annexed,	552 27	
	<hr/>	<hr/>
	\$41,945 81	\$41,945 81

*Statement of Receipts and Expenditures within the year.*

Balance money on hand, per last annual report,	-	203 34	
Capital stock—amount received from individuals,	-	1,104 00	
Capital stock—amount received from Board of public works,	-	5,368 75	
Tolls collected from commencement,	-	1,691 24	
Disbursements during the year:			
For construction of road,	-		4,569 74
For pay of treasurer from commencement to time of his resignation, 22d January 1851,	-		961 15
For salary of toll-gatherers at five gates, from commencement to date,	-		250 64
For salary of superintendent from 1st January to 10th June 1851, at \$175 per year,	-		77 78
For engineer's salary for January and February 1850, two months, at \$1000 per annum,	-		166 66
Paid bills for subsistence of engineers, hand hire, &c. while engaged in location,	-		172 08
For land damages,	-		186 00
For repairs of road from commencement to this date, including pavement, &c.			880 02
Paid for two mules,	150 00		
Paid for one cart,	40 00		
Paid for harness, and other tools,	60 00		
			250 00
Paid Lynchburg fire insurance company insurance on \$750 for Otter bridge, and \$1,500 on Staunton river bridge—in all	-		34 25
Clerks' and sheriffs' tickets summoning juries, &c. in securing right of way,	-		36 11
Incidental charges—paid J. T. W. Read, former president, and Alex. Irvine, account for expenses incurred while engaged in business of the turnpike, and printing blanks, &c.	-		53 15
Interest account—for interest paid on loan from Citizens savings bank, and other dues from company,	-		177 48
Balance cash on hand,	-		552 27
		<u>\$8,367 33</u>	<u>\$8,367 33</u>

OFFICE OF THE ROCKYMOUNT TURNPIKE CO.,  
October 18, 1851.

At a meeting of the board of directors held this day, the foregoing statement of the affairs of the company was read, approved, and ordered to be forwarded to the Board of public works.

STEPHEN C. HURT, *Clerk.*

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The length of this improvement is fifty miles. The number of toll-gates is five. The compensation allowed the toll-gatherers is \$100 per annum at one gate, \$75 per annum at three gates, and \$50 per annum at the other gate. The road is kept in repair by employing hands for that purpose by the company, with an overseer, under the superintendence of the president. There is no map of the improvement. In consequence of a failure to make a settlement with all the contractors, it is impossible to give the cost per mile of making the road.

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*List of the President, Directors and other Officers.*

Pleasant Preston, president; Charles H. Lynch, Lynchburg, John S. Hale, Franklin, Alexander Irvine, Bedford, Henry Davis, Lynchburg, Samuel McCorcle, directors.

The president is allowed a salary of \$175 per annum as superintendent of the road.

Stephen C. Hurt, treasurer and secretary, compensation not fixed; Thomas Wood, toll-gatherer 1st section, salary \$100; William Overstreet, 2d section, \$75; Joseph Meador, 3d section, \$75; Benj. Betz, 4th section, \$75; Luke Gwilliams, 5th section, \$50; Creed T. Hubbard, overseer, salary \$150.

Six hands a portion of the year are now employed—only four slaves; hire \$100 per annum.

STEPHEN C. HURT, *Treasurer.*

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RUSSELL AND WASHINGTON TURNPIKE COMPANY.

The board of directors of the Russell and Washington turnpike company report to the Board of public works as follows:

Since the last report, an appropriation of \$1,250 to the capital stock of the company has been authorized by an act of the general assembly, passed March 15th, 1851, on the same terms and conditions with the original and former appropriations, for the purpose of completing the whole line of road from its commencement at the Cum-

berland gap and Price's turnpike in Russell county, to the Saltworks in Washington county, with liberty to the company, by authority of said act of March 15th, 1851, to construct a plank road from the North fork of Holston to the terminus at the Saltworks, a distance of about one mile and three-quarters. The directors had a resurvey made of a site for this part of said road, with a view of obtaining a suitable location and lowering the grade for a plank road between said two points; and after considering the character of the ground over which it would have to be taken, were unanimously of opinion that a plank road ought to be made in preference to a dirt turnpike or a macadamized road, as the character of the ground would forbid the practicability of either of the latter, and accordingly, on the 5th day of July 1851, offered the same for contract; but no person bidding for the same for the sum appropriated, (to wit, \$ 1,250,) except Thomas L. Preston of Smyth county, and that with certain privileges to be guaranteed to him—and it appearing to the board that there was no probability of getting a more favorable proposition than Mr. Preston's to construct said plank road—his proposition was accepted by the board, and is in substance as follows:—He takes the whole of the individual stock, being 20 shares, amounting to \$ 500, which will authorize the directors to draw for the state's share, \$ 750; and for this capital he is to construct a plank road from the North fork of Holston river to the Saltworks, eight feet wide, with elevated sideways, throwing up the earth to a proper height, and making the space between the side ditches, which are to drain the road, 25 feet wide, including the measurement on the plank, and to complete the road between the points aforesaid by the 1st day of January 1852; and he is to keep said road in good repair at his own expense for the period of five years from the time when it shall be completed, and leave it at the end of said term in like good repair; and in addition to the tolls which his own stock (viz: \$ 500) would entitle him to, to be exempted from tolls for his own wagons, teams, carriages, horses, and all kinds of stock which he may have under his control or subject to his control, or for his use, that may pass either way on said plank road during his life; and at his death, this privilege to vest in the owners of the *Preston estate* at the Saltworks, by their bearing one-half the expenses of keeping said plank road in repair. Said privilege granted him is not to be transferred, either by sale or lease, during his lifetime.

The directory would state, that only three sections of said road have as yet been fully completed and received, namely, section No. 1, undertaken by Andy F. Hendricks; section No. 5, one of the three sections undertaken by James Culbertson; and section No. 7, undertaken by Viver M. Mead, (being only one mile and 270 poles.)

The section undertaken by Andrew C. Ferguson is expected to be finished by the 1st of December next.

The section taken by Aaron L. Hendricks will not, it is probable, be completed by the 1st of January next.

And the two unfinished sections in James Culbertson's contract have been worked out only in part, and it is uncertain when they will

be finished, though there are now, and have been for some time past, a number of hands engaged in working on said sections.

Mr. Preston, as the directors are informed, has thrown up the ground preparatory to laying down the plank on nearly the whole of his section between the river and Saltworks, and has laid down the plank on part of said section.

A sufficient distance to authorize the putting up of toll-gates upon the portions of said road that have been received not being finished in connection, the directory have as yet made no arrangement for the collection of tolls.

By the act of assembly passed March 15th, 1851, the company are authorized to increase their capital stock \$ 300, for the purpose of extending the road from its terminus at the Saltworks to some suitable point on the macadamized road from Marion to Abingdon. No survey has yet been ordered preparatory to its location.

The directors present herewith a statement of the affairs of said company for the year ending the 30th of September 1851, and a list of the stockholders at the same period.

All which is respectfully reported.

By order of the board of president and directors.

JAMES P. CARRELL, *Clerk.*

*September 30th, 1851.*

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A full meeting of the stockholders in the above road, necessary for the transaction of business, not being had on the day for which it was appointed, to wit, on the 19th day of September 1851, the board of directors on the part of the company remains as heretofore, to wit: Aaron Hendricks, John T. Smith, James P. Carrell, Henry D. Smith, Abraham Fuller and Robert Boyd.

The board, on the day above mentioned, appointed Aaron Hendricks president, James P. Carrell secretary, and Thomas C. M. Alderson treasurer to said board; and Henry D. Smith superintendent, whose salary is \$ 1 50 per diem for the time he may be actually employed in his official duties.

No allowance has yet been made to the secretary or treasurer for their services.

JAMES P. CARRELL, *Clerk.*

Thomas L. Preston, Whitley Fuller and Isaac Vermillion are directors for the state, and George Cowern its proxy.

JAMES P. CARRELL, *Clerk.*

*September 30th, 1851.*

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*Return of the state of the Russell and Washington Turnpike Company  
for the year ending 30th September 1851.*

Capital stock, by act March 6, 1848, - - -	10,000 00	
Capital stock increased by act Feb. 7, 1850, - -	1,125 00	
Total, -	<u>\$11,125 00</u>	
Subscribed by individuals 178 shares, at \$ 25 each, - - -		4,450 00
Subscribed by the commonwealth 267 shares, at \$ 25 each, - -		6,675 00
Amount of commonwealth's subscription unpaid, - - -	1,287 00	
Amount of individual subscription un- paid, - - -	795 50	
Expended in construction of work from commencement in 1849 :		
For locating road, - - -	151 88	
Postage and advertising, - -	10 76½	
To contractors, - - -	3,897 50	
Land damages and fees of officers, -	81 03	
Cash on hand 30th September 1851, as per statement below, - -	4,901 32½	
	<u>\$ 11,125 00</u>	<u>11,125 00</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report, - - -	4,552 34	
Add receipts during the year, viz :		
For capital stock, amount received from individuals, - - -	1,265 50	
For capital stock, amount received from Board of public works, - -	1,810 50	
Add error in account reported last year of - - -	4 00	
Total receipts, - -	<u>7,632 34</u>	
Deduct disbursements during the year :		
For improvements and repairs, nothing.		
To Aaron S. Hendricks, a contractor,	472 50	
“ James Culbertson, “	1,019 50	
“ Andy F. Hendricks, “	550 50	
“ Andrew C. Ferguson, “	665 00	

20 00	
2 39	
1 12½	
<hr/>	2,731 01½
-	<hr/>
	\$ 4,901 32½
	<hr/>

JAMES P. CARRELL, *Clerk.*

# PEPPER'S FERRY TURNPIKE.

BLACKSBURG, 14th Oct. 1851.

Wm. Richmond.

and annual report and statements required  
these documents will be found sufficiently  
satisfactory.

Your ob't serv't,

GERMANICUS KENT, *Clk.*

*Salem and Pepper's Ferry Turnpike Company*  
year ending September 30th, 1851.

Cost of public works	120		
	-	6,000	00
Cost of 222 shares, at \$50,		11,100	00
	-	6,646	05
Cost of water, including interest,		3,168	19
	-	495	36
		<hr/>	27,409 60
Cost of building road,	-	257	68
	-	1,041	00
	-	138	37
	-	40	25
Cost of road,	-	17,097	75
	-	642	25
	-	565	24

Paid repairing road,	-	-	-	2,561	80
Paid executions,	-	-	-	100	07
Paid discounts,	-	-	-	34	00
Paid gate-keepers,	-	-	-	1,196	06
Paid collectors,	-	-	-	30	00
Paid interest account,	-	-	-	1,227	57
Amount delinquent stock,	-	-	-	630	00
Amount individual indebtedness,	-	-	-	1,847	56
					<u>\$27,409 60</u>

By order of the board of president and directors.

GERMANICUS KENT, *Clk.*

14th Oct. 1851.

*Statement of Receipts and Expenditures during the past year.*

Balance cash on hand, per last report,	-	-	-	50	46
Received of R. Caldwell,	-	-	-	100	00
Received of John Evans,	-	-	-	10	00
Received of do.	-	-	-	29	59
Received of R. Caldwell,	-	-	-	28	50
					<u>\$218 46</u>
Paid sundry clerks' tickets,	-	-	-	8	91
Paid James P. Snidow, account repairs,	-	-	-	100	00
Paid G. Kent, account salary,	-	-	-	51	55
Paid James W. Kirby, account repairs,	-	-	-	29	50
Paid Jesse C. Hall, do.	-	-	-	28	50
					<u>\$218 46</u>

By order of the board of president and directors.

GERMANICUS KENT, *Treas'r.*

14th Oct. 1851.

*Estimate of Expenses of Salem and Pepper's Ferry Turnpike Company to 1st October 1851—one year.*

Contract with J. P. Snidow to keep 27 miles of road in repair for the tolls received at the lower gate for the year.

Allowed by the board :

On account of repairs by James R. Kent, paid him in 1849 and 1850,	-	-	-	182	00
Interest on payment by him of \$249 50, 12 months,				14	97
On account of Jesse C. Hall, for repairs to the road in 1850, not passed last year for want of a board,	-	-	-	108	50

The clerk and treasurer's account, \$ 30 per annum.

John Evans keeping gate 7 months, 29 16

Due by John Evans, agreeably to the books, a part of which  
is not adjusted, - - - 163 24

By order of the board of president and directors.

GERMANICUS KENT, *Clerk.*

October 14th, 1851.

Original length of road, 37 miles.

Present length of road, 27 miles.

The loss of 10 miles from Salem to Fayette by the S. W. improvements destroys the value of the road.

### *Officers.*

James R. Kent, president ; Charles Black, Wm. Thomas, Henry Ribble, George Emhart, Jesse C. Hall, directors ; G. Kent, clerk and treasurer.

There has not been any change in stockholders during the past year, and the lists of delinquents are the same. Please refer to the report of last year for those lists.

By order of the board of president and directors.

GERMANICUS KENT, *Clerk.*

October 14th, 1851.

## SHEPHERDSTOWN AND SMITHFIELD TURNPIKE COMPANY.

*Statement of the Affairs of the Shepherdstown and Smithfield Turnpike Company for the year ending 30th September 1851.*

### Capital stock :

Subscribed by individuals,	-	-	\$ 28,111 75
" " the state,	-	-	18,575 00

Expended on the work from commence- ment to date,	-	-	\$49,738 93
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### Receipts :

For tolls collected at Shepherdstown gate,	388 78
" " Leetown gate,	181 70

\$ 570 48

**Expenditures :**

By repairs to the road,	-	-	437	48
" salary of gate-keeper at Shepherdstown,			60	00
" " " " Leetown,			50	00
" " secretary and treasurer,			23	00
			<u>          </u>	<u>\$ 570 48</u>

By order of the president and directors.

JOHN M. JEWETT, *Sec'y.*

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Edmund J. Lee, president ; Samuel Scallay, W. L. Webb, James V. Moore, Vincent M. Butler, directors. John M. Jewett, secretary and treasurer, salary \$ 23. Joseph Fleming, gate-keeper at Shepherdstown, salary \$ 60. Mrs. L. Lindsay, gate-keeper at Leetown, salary \$ 50.

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## SHINNSTON TURNPIKE COMPANY.

LUMBERPORT, HARRISON COUNTY, VA.

*To the Honorable Board of Public Works of Virginia.*

GENTLEMEN,

The president and directors of the Shinnston turnpike company, in pursuance to what they perceive to be their duty under the law, beg leave to make report to your honorable body of the condition of the affairs of the said Shinnston turnpike road up to the 1st of Oct. 1851.

By virtue of an act of the general assembly of Virginia, passed Feb. 7th, 1850, the stockholders of said company met on the 22d of Nov. 1850 and organized ; and the president and directors held their first meeting on the 4th day of January 1851, when they appointed their officers and agents, and directed the road to be located and put in a state of immediate construction.

By the report of the engineer and a diagram of said road prepared by the same officers, it is seen that the entire length of the road is 33½ miles, and 19 miles of which have been put under contract, to be completed by the 15th of November 1851 ; and progress in the same warrants the conclusion that the several contractors engaged will have their respective portions completed, if not by the time specified, in a very few weeks afterwards at farthest.

Seven miles more have been put under contract, but it is calculated not to have these seven miles completed sooner than the 15th of October 1852, inasmuch as the contractors have till then to complete the same.

It is not contemplated by the board of directors to put the remaining  $7\frac{1}{2}$  miles under contract until it shall have seen, at the end of the ensuing fiscal year, how the financial affairs of the company will stand.

From the best estimates the board has been able to make, there will want about \$2,500 to complete the whole line of road, after expending the \$1,200 provided for by the charter.

The agents employed to solicit subscriptions from individuals report that there are yet lacking but three shares to fill the charter on the part of individuals, all of whom are considered good and solvent, so far as the board are advised.

Up till the 1st of October, according to the treasurer's account, there has been collected the sum of \$3,279  $10\frac{1}{2}$ , of which \$1,740  $39\frac{1}{2}$  has been derived from individuals and \$1,538 71 has been derived from the state of Virginia, and the expenditures have been, during the same period, \$1,101 50.

A list of the names of the stockholders follows, and any farther information on the subject, which the board of directors are enabled to impart, will be cheerfully communicated at the request of the honorable board of public works of the state of Virginia.

JAMES S. GRIFFIN, *President.*

M. J. ORR, *Clerk.*

October 1851.

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## SISTERSVILLE AND SALEM TURNPIKE COMPANY.

MIDDLEBOURNE, TYLER CO., VA.

October 30, 1851.

### *Report of the Commissioners of the Sistersville and Salem Turnpike to the Board of Public Works of Virginia.*

The circular of the secretary of the Board of public works, post marked Oct. 3, was miscarried, and returned from Centreville on the 11th. The 33 miles of road made as reported Oct. 20, 1850, remain in the same state, excepting unavoidable wear and washing, with but very little repairs. It is stated in the following return that the cost of Andrew Colley's work exceeds the appropriation by \$264 39.

The following was the cause of the construction overreaching the appropriation: We were informed by Col. Boyers, then a member of the Board, that the compensation of the commissioners would *not* be paid from "the appropriation," but from a contingent fund. Of this I was not satisfied, though not certain that it was not so; and being assured by Mr. Wells, the commissioner of Tyler county, who seemed to rely confidently on that information, the location was extended, and

a contract entered into with Andrew Crolley, extending about a mile further than the appropriation would reach.

A. Crolley was advised to leave that part unmade until we could learn the amount of funds applicable to payment on the work constructed. He persevered and finished to the end of the location, not doubting that an appropriation would be made, if necessary, to remunerate him for his labor. To do him justice this ought to be done.

After having apprised Mr. Crolley of my doubts as to the sufficiency of funds, I thought proper not to call on the Board of public works for my compensation until I should be informed, and let him forward his certificates first.

*Return of the state of the Sistersville and Salem Turnpike Company for the year ending 30th September 1851.*

<b>Capital stock, \$11,455 :</b>			
Subscribed by individuals,	-	-	455 00
“ commonwealth,	-	-	11,000 00
Amount of individual subscription unpaid,		12 00	
Expended in construction of work from commencement (1847) to this date :			
To Wm. Stagg, making 10 miles road, at \$ 302 50 per mile,	-	-	3,025 00
To A. Crolley, making 10 miles road, at \$ 295 per mile,	-	-	2,950 00
To David Davis, for extra work on road,	-	25 00	
To A. W. Leach, for work and improvement on road,	-	-	137 52
To James Smith, building Indian creek bridge,		300 00	
To A. Crolley, second contract 10 miles road, at \$ 300,	-	-	3,000 00
To A. Crolley, third contract 4 $\frac{3}{4}$ miles road, at \$ 300 per mile,	-	1,425 00	
Balance on work at Jug mile,		1 50	
		<u>1,426 50</u>	
Unpaid,		*264 39	
		<u>1,162 11</u>	
To A. Crolley on individual subscription, nothing.			
McCroy, subscription,	-	290 00	
On Jug mile subscription,	-	108 00	
On Middlebourne subscription,		45 00	
		<u>443 00</u>	

\* See note on page 90.

To commissioners :			
J. T. Nicklin,	-	-	230 00
Hands and board,	-	-	45 87
		check	275 87
Eli Wells,	-	-	*145 50
			<hr/> 11,476 00
	Error,		21 00
			<hr/>
		\$ 11,455 00	11,455 00
			<hr/> <hr/>

Amount of certificates stated 22d May 1849 :

To W. Stagg, certificate for 10 miles road,	3,025 00
" A. Crolley, " " "	2,950 00
" David Davis, for extra work, - -	25 00
	<hr/> 6,000 00

Stated 25th Oct. 1850 :

To A. Crolley, certificate for 10 miles road,	2,775 00	
To A. Crolley, " " 4 " "	1,200 00	
To A. Crolley, certificate 5 per cent. on 1st		
5 miles, - - - -	225 00	
To A. Crolley, certificate for 1/4 mile, and \$1 50,	226 50	
	<hr/> 4,426 50	
To A. W. Leach, September 10, 1849, -	137 52	
To James Smith, February 11, 1850, -	300 00	
	<hr/> 437 52	
		10,864 02
To sum'r J. T. Nicklin, hands and board,		
(check.) - - - -	275 87	
E. Wells, stated at - - - -	+145 50	
	<hr/> 421 37	
		11,285 39
		+264 39
		<hr/> 11,021 00
Appropriation, - - - -		11,000 00
		<hr/>
	Error,	\$ 21 00
		<hr/> <hr/>

The sum must be in information received as to sum paid E. Wells as commissioner, and the sum paid A. Crolley on his certificate, \$225. It is confidently believed that the sum must be in any other part. If E. Wells was paid \$1 25 per day, and the aggregate of the sum must be in the account would close. Of \$480 reported 22d Oct. 1849, part of the sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners.

The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners. The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners. The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners.

The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners. The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners. The sum must be in the account of subscribers, and \$25 not applied, left at disposal of commissioners.



Remaining unpaid, Andrew Crolley,	-	264 39	
Bal. to J. T. Nicklin, Oct. 25, 1850,	52 00		
Bal. hands on road, " "	5 25		
	<hr/>		
	57 25		
J. T. Nicklin, report 30th Oct. 1851,	5 00		
Remaining unpaid J. T. Nicklin,	<hr/>	62 25	
		<hr/>	326 64
Paid by commonwealth, - - -	-	-	11,000 00
			<hr/>
Cost to commonwealth, - - -	-	-	11,326 64
Paid by individuals, - - -	-	-	455 00
			<hr/>
Entire cost of S. and S. turnpike, - -	-	-	<u>\$11,781 64</u>

It was not anticipated that Eli Wells, for his services as commissioner, would be paid by the Board of public works, as the notice of Eli Wells, of Charles, by Tyler county, as commissioner on the part of Tyler county, was received from the board, dated 8th July 1847, and it was expected here that he would be paid by the county, or by subscription; and Mr. Wells often remarked that he did not expect nor ask anything excepting his expenses paid.

My information as to his compensation (stated at \$145 50) was from himself and Col. J. Boyers, then a member of the legislature. I never received any notice from the Board of public works that he was allowed or paid anything.

For the services of Rodney Hickman, treasurer S. and S. turnpike, no compensation has been received by him. Though his duties are light, there is a weight of responsibility resting on him in his penal bond of \$12,000, dated Sept. 15, 1847, payable to the president and directors of the Board of public works. His duties have been faithfully performed to the drawing and disbursement of the appropriation, without any part thereof passing through his hands.

It is not now in my power to furnish a list of private stockholders to operate jointly with the Board of public works with the last appropriation, as I am not in possession of a copy. I have written to obtain a list shewing the amount subscribed and amount unpaid on 30th Sept. 1851. It shall be sent on as soon as it can be obtained.

I have been informed that a list of the stockholders has been sent by the officers.

ley, dated February 19, 1851. He says: "On 25th Sept. last I cashed for you two claims drawn by R. Hickman, treasurer, &c. on the Board of public works, viz:

One for \$225, and one for	-	-	-	226 50
On the first there has only been paid \$187 11. The other, for \$226 50, has been returned to me with a statement from the cashier of the Bank of Virginia that there is no money—"appropriation exhausted,"	-	-	-	225 00
				<hr/>
				451 50
Paid, - - -	-	-	-	187 11
				<hr/>
Balance unpaid, - - -	-	-	-	<u>\$264 39</u>

As the general route of the road is so near the location of J. Thompson, and it was presumed he had furnished a map accompanying his report, no map has been made. If required, it can be furnished, but not with the present report.

Length of road finished 35 miles ; unfinished about 3 miles ; average cost per mile to the state \$ 323 61 ; whole cost per mile \$ 336 61.

Respectfully submitted.

J. T. NICKLIN,  
*Com'r S. and S. Turnpike.*

*Sistersville and Salem Turnpike Certificates.*

William Stagg :			Andrew Crolley :		
1848.			1847.		
Jan. 14,	1st certificate,	257 12½	Dec. 31,	1st certificate,	250 75
July 18,	2d do.	257 12½	1848.		
July 18,	3d do.	257 12½	Feb. 8,	2d do.	250 75
Aug. 29,	4th do.	257 12½	Mar. 13,	3d do.	250 75
Sept. 15,	5th do.	257 12½	May 12,	4th do.	250 75
Sept. 30,	6th do.	302 50	May 12,	5th do.	250 75
Oct. 20,	7th do.	302 50	July 18,	6th do.	295 00
Oct. 20,	8th do.	302 50	Aug. 29,	7th do.	295 00
Nov. 14,	9th do.	302 50	Sept. 15,	8th do.	295 00
Nov. 28,	10th do.	302 50	Oct. 22,	9th do.	295 00
Nov. 28,	11th do. 15 per cent.	226 87½	Nov. 18,	10th do.	516 25
		<u>\$ 3025 00</u>			
A. Crolley's certificates :			A. Crolley,		
1849.			W. Stagg,		
June 8,	11th,	255 60	1848.		
June 16,	12th,	255 00	Nov. 28,	certificate to David Davis,	25 00
July 7,	13th,	255 00			
July 9,	14th,	255 00	A. Crolley's certificates :		
Aug. 13,	15th,	255 00	1850.		
Sept. 6,	16th,	300 00	May 15,	21st,	300 00
Sept. 12,	17th,	300 00	June 1,	22d,	300 00
Oct. 20,	18th,	300 00	June 22,	23d,	300 00
Nov. 30,	19th,	300 00	July 20,	24th,	300 00
1850.			July 20,	25th,	225 00
May 9,	20th,	300 00	July 20,	¾ mile and am't	
		<u>\$ 2775 00</u>	at Jug, \$1 50,	226 50	
			1651 50		
			2775 00		
			<u>4426 50</u>		
			10426 50		
			1849.		
			Sept. 10,	A. W. Leach, certificates,	137 02
			1850.		
			Feb. 11,	James Smith, do.	300 00
			<u>\$10864 02</u>		

J. T. NICKLIN,  
*Com'r S. and S. Turnpike.*

# SMITHFIELD, CHARLESTOWN AND HARPER'S FERRY TURNPIKE COMPANY.

OFFICE SMITHFIELD, CHARLESTOWN AND HARPER'S  
FERRY TURNPIKE Co., Oct. 17, 1851.

*To the Board of Public Works.*

Herewith is transmitted a statement of the treasurer, shewing the receipts and disbursements for the year.

No dividend has been declared in consequence of having to apply the whole income of the company, after the payment of the necessary expenses, to the reduction of the debts against the company, which amount to upwards of \$7,000. It will be seen by reference to our former reports that a sale of part of the road was respectfully recommended, as it was believed that the debts could not be paid off in any reasonable time.

The road is nearly 14 miles in length—13½ miles under tolls. Two hands are generally kept employed in keeping it in repair. A map of the road will be forwarded as soon as it is prepared.

HUMPHREY KEYES,  
*Sec'y and Treas'r.*

## *Return of the state of the Smithfield, Charlestown and Harper's Ferry Turnpike Company for the year ending 30th Sept. 1851.*

Capital stock, \$ 35,750 :

Subscribed by individuals 435 shares,	21,750 00
Subscribed by the state 280 shares,	14,000 00
Tolls received from the commencement,	27,234 23½
Amount individual subscriptions unpaid,	482 37
Expended on the work since the commencement to this date,	64,377 38
Cash on 30th September 1851, per statement below,	97 11

## *Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report,	160 72
Tolls,	1,948 47
	<u>2,109 19½</u>
Deduct disbursements during the year:	
On debts due for construction,	218 43
For repairs,	1,353 00
Toll receivers,	379 57
Damages,	61 08
	<u>2,012 08½</u>
Balance of money on hand,	<u>\$ 97 11</u>

HUMPHREY KEYES, *Treasurer.*

# SNICKER'S GAP TURNPIKE COMPANY.

*Return of the state of the Snicker's Gap Turnpike Company, October 1, 1851.*

Capital stock, 1,705½ shares at \$ 50,	-	-	\$85,275 00
“ “ subscribed by individuals,	65,275 00		
“ “ due from individuals, (insolvent,) -	1,032 00		
Capital stock, subscribed by Board of public works,	-	20,000 00	
Capital stock, due from Board of public works, none.			
Received from lotteries, or any source of additional capital, nothing.			
Debts due from the company, none.			
One claimed by Roan & Carter, considered by the board as not binding, now obsolete,	541 51		
Debts due the company other than subscribed to stock, none.			
Bank and other stock held by the company, none.			
Expended in the work from its commencement,	-	-	<u>\$103,438 44</u>

*Statement of Receipts and Expenditures from October 1st, 1850, to October 1st, 1851.*

Balance of money on hand, per last report, none.			
Tolls from October 1st, 1850, to October 1st, 1851,	-	1,011 81	
		<u>1,011 81</u>	
Deduct disbursements during the year:			
For improvements and repairs,	-	439 62	
For officers' salaries—treasurer's commissions,	-	45 23	
For expenses collecting toll and incidental expenses, nothing.			
For 3 gate-keepers, at \$120 each year,		360 00	
For expenses of the board at their several meetings,	-	19 41	
For printing, postage and paper,	-	1 00	
For taxes,	-	1 58	
Balance due treasurer last annual report,		35 60	
		<u>902 44</u>	
Balance in hands of treasurer October 1st, 1851,			<u>\$109 37</u>

Dividends declared, none.

Francis McCormick, president; James Mount, James Castleman, Samuel McCormick, Joseph Nichols, directors; Joseph P. Megeath, treasurer.

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The Snicker's gap turnpike commences at Aldie, Loudoun county, Virginia, and terminates at Snicker's ferry on the Shenandoah, in Clarke county, Virginia, at the foot of the Blue Ridge mountain. The length of the improvement is  $17\frac{1}{2}$  miles. There are three gates; each gate-keeper receives \$120 per year. The tolls are paid over to the treasurer each quarter, or oftener if required.

JOS. P. MEGEATH, *Treasurer.*

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GENTLEMEN,

Enclosed you have the report of the Snicker's gap turnpike company up to October 1st, 1851. The receipts during the last year have fallen short of the preceding year \$232 46; consequently the expenditures have been less, which now leaves a balance in the hands of the treasurer of \$109 37. But little work has been done on the road. The road is in tolerable repair. The tolls for the coming year will be, I presume, about the same as for the year just terminated.

Yours, respectfully,

JOS. P. MEGEATH,  
*Treas. S. G. T. Co.*

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## SPERRYVILLE AND RAPPAHANNOCK TURNPIKE CO.

At a meeting of the stockholders of the Sperryville and Rappahannock turnpike company, held after due notice, as published in the "Flag of '98," a newspaper published in the town of Warrenton, at the courthouse door of Rappahannock county, and, in the manner prescribed by law, at the courthouse aforesaid, on Friday after the second Monday in May 1851, being the 16th day of the month:

On motion of Horatio G. Moffett, John G. Lane, Esq. was called to the chair, and W. J. Menefee, the clerk of the board, acted as secretary.

On motion, Robert H. Spindle and Middleton Miller, Esqs. were appointed by the chairman a committee to examine proxies, and to

report to the meeting forthwith such as are executed according to the manner prescribed by the 3d article of the by-laws, and also such as are not.

Robert H. Spindle and Middleton Miller, who were appointed to examine proxies, made their report, which was examined by the meeting, approved, received, and ordered to be filed.

The clerk ascertained and declared, from a roll of the stockholders, made by him in alphabetical form and here produced, that owners of stock entitled to a majority of all the votes which could be given by all the stockholders were present, either in person or legally appointed proxies, to wit, 262.

Reports of the president and treasurer of the company were this day presented to the meeting, which were read, approved, and ordered to be recorded; and on the motion of R. M. Heterick, the state proxy, it is further ordered that copies of the said reports be certified to the Board of public works, which follow in these words:

*“ To the Stockholders of the  
Sperryville and Rappahannock Turnpike Co.*

“ By the accompanying circular from the Board of public works we are urged to take into consideration the expediency of changing the time of our annual meetings to some early day in October, for reasons set forth in the circular; therefore, I recommend that your annual meeting be changed to the first Friday in October.

“ By the report of your secretary and treasurer you will perceive at a glance the condition of the monetary affairs of the company.

“ At the letting in August last your road was put under contract to Amissville, sealed proposals having been advertised for and received. A contract was made with J. W. Barneclo for grading the whole distance, and for metaling from Sperryville to Washington, a distance of six miles, and from Gaines' Crossroads to Amissville, a distance of  $5\frac{1}{2}$  miles, designated as sections Nos. 1 and 3. The metaling of section No. 2, from Washington to Gaines' Crossroads, a distance of six miles, was let to John Jett; the average price per mile for grading and metaling was \$2,301, with a provision in the contract, that if the board directed one inch of earth to be put upon the metal, the contractor was to receive therefor \$64 per mile. Subsequently, say on the first of February last, the residue of the line was put under contract, at the average price of \$2,301 per mile. Section No. 4, extending about  $2\frac{1}{2}$  miles below Amissville, to J. W. Barneclo, and the residue of the distance, about two miles, to John S. Armstrong.

“ On the       day of       J. W. Barneclo's contract was declared abandoned by your board of directors, in consequence of his failure to comply with the terms of his contract. It then became necessary for your board to take steps for the immediate prosecution of the grade on section No. 2, in order that John Jett might sustain no loss in not having it in readiness to metal, he having made a large outlay in horses, oxen, wagons, &c., and hire of negroes by the year—in the

prosecution of which, it was manifest that the price at which it was let (\$475 per mile) was insufficient to do the work. It is now in process of grading and nearly finished.

“Sections Nos. 1 and 3 have been relet at a gain upon former contract, the time of completion extended to 1st April next, and the contractors are now at work upon them. John S. Armstrong is finishing section No. 4 as assignee of J. W. Barnecko, under the sanction of your board.

“John Jett is prosecuting vigorously his contract, and confidently expects to finish prior to the 1st of January next. John S. Armstrong too has a large force upon sections 4 and 5, and will no doubt finish them by the 1st of April next.

“The board of directors have endeavored to practise the most rigid economy in the management of the affairs of the company.

“Believing that it would redound to the interest of the community as well as of your road that it should be extended to Warrenton, I, together with R. M. Heterick, Esq. the state proxy, petitioned the legislature for an increase of capital stock for that and other purposes; which increase has been granted. I would recommend that you now take steps to secure said extension, as by said extension we secure a through travel from Newmarket to Warrenton, there to connect with a stem of the Orange and Alexandria railroad, for which a charter was granted last winter by the legislature, and I am advised that said stem will certainly be built. The advantages of such a connection are manifest to you all.

“As you will doubtless adopt the suggestions of the Board of public works by fixing an annual meeting at an early day in October, I have not endeavored to report as fully as I shall then; nor can I do so now, owing to the infancy of the work.

“JOHN G. LANE,  
“Pres't S. & R. T. Co.

“Office Sperryville and Rappahannock T. Co.,  
Washington, 16th May 1851.”





Amount expended in the construction of the work from commencement up to 16th May 1851, viz :			
To J. W. Barneclo, for grading, &c., on sections Nos. 1, 2, 3 and 4, -	5,422	60	
To John Jett, for metaling on section No. 2, - - - - -	1,728	00	
To John S. Armstrong, grading and metaling on section No. 5, - - -	1,225	00	
To John S. Armstrong, as assignee of J. W. Barneclo, for work done on section No. 4, - - - - -	168	00	
Amount paid to John G. Lane, president, by orders of the board, in order to prosecute the grading on section No. 2, after the contract with J. W. Barneclo was declared abandoned, &c. -	2,170	56	
Total disbursements, -			12,169 38
Balance on hand, -			<u>\$ 2,306 57</u>
Deposited in Valley Bank at Winchester, -	2,220	90	
Cash in treasurer's hands, - - -	85	67	
			<u>\$ 2,306 57</u>

*Statement shewing the Amount of Orders of the Board of President and Directors made on the Treasurer of the Company, which remain unpaid on the 16th day of May 1851.*

Amount of land damages remaining unpaid, - - -	555	25
Amount of expenses generally, remaining unpaid, -	17	37
Amount for tools, carts, &c., purchased by the company, remaining unpaid, - - - - -	163	59
Amount ordered to be paid to John G. Lane, president of the company, for the purpose of paying for work done under his management, and to be done on section No. 2 to its completion as to grade, &c. - - - - -	750	00
		<u>\$1,486 21</u>

#### *List of Officers.*

John G. Lane, president ; Willis Browning, James Jett and Middleton Miller, state directors. John Miller and Gideon H. Brown, directors for individual stockholders ; M. S. Lovett, engineer ; W. J. Menefee, clerk and treasurer.

I submit, as my report to the stockholders of the Sperryville and Rappahannock turnpike company, the foregoing statements, shewing the amount of subscriptions made by the commonwealth and individuals unpaid, the amount of receipts and disbursements up to the 16th May 1851, the balance of means on hand and the amount of orders made by the board upon the treasurer which remain unpaid.

W. J. MENEFEE, *Treasurer.*

*S. & R. T. Co.*

*Office of S. & R. T. Co.,  
16th May 1851.*

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Upon the motion of H. G. Moffett the following resolution was unanimously adopted :

*Resolved*, That the stockholders of the Sperryville and Rappahannock turnpike company accept the provisions of the act of the general assembly of Virginia, entitled " An act to increase the capital stock of the Sperryville and Rappahannock and Thornton's gap turnpike companies ;" and that the president and directors of the Sperryville and Rappahannock turnpike company be instructed to take proper measures to carry into effect so much of the said act as relates to said company.

Upon motion, it was

*Resolved*, That the annual meetings of the stockholders of the Sperryville and Rappahannock turnpike company be hereafter held on the first Friday in October in each year, to commence in October next, instead of the Friday after the second Monday in May, as heretofore fixed.

The following resolution was also unanimously adopted by the meeting :

*Resolved*, That the election of officers on behalf of the individual stockholders of the company be postponed until the first Friday in October next ; and that the present officers in their behalf continue in office, by operation of law, until others be elected.

True copies from the records of the proceedings of the company.

Teste :

W. J. MENEFEE, *Clerk.*

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I, William J. Menefee, clerk of the Sperryville and Rappahannock turnpike company, hereby certify that the foregoing are true copies of the proceedings of said company, at their meeting held on the 16th of May 1851. In testimony whereof I have herunto subscribed my name and affixed the seal of said company this 20th day of May in the year 1851.

W. J. MENEFEE, *Clerk.*

At an annual meeting of the stockholders of the Sperryville and Rappahannock turnpike company, held at the courthouse of Rappahannock county on Friday the 3d day of October 1851, (the day fixed by the stockholders at their last meeting,) pursuant to notice duly published in the "Flag of '98," a newspaper published in the town of Warrenton, and at different public places in this county :

On motion of H. G. Moffett, Monroe Kelly, Esq. was called to the chair to preside over this meeting, and W. J. Menefee, clerk of the board, acted as secretary.

On motion, the chairman appointed J. G. Lane and H. G. Moffett a committee to examine proxies, and to report to the meeting such as are executed according to the manner prescribed by the 3d article of the by-laws and also such as are not.

J. G. Lane and H. G. Moffett, the committee appointed to examine proxies, &c., returned their report, which was read, approved, received and ordered to be filed among the records of the company.

The clerk ascertained and declared from a roll of the stockholders in alphabetical form here produced, that owners of stock entitled to a majority of all the votes which could be given by all the stockholders, are present, either in person or legally appointed proxies, to wit:

Whole number of votes in the company,	510	
Number of votes by individuals present,	-	212
State proxy present,	-	128
		<hr/>
		340
Majority of the whole,	-	256
Majority of the individual stockholders,	-	192

Reports of the president and treasurer of the company were this day presented to the meeting, read, approved, received and ordered to be recorded among the proceedings of the meeting; and on motion of the state proxy, it is also ordered that true copies thereof be certified to the Board of public works, which follow in these words:

*" To the Stockholders of the  
Sperryville and Rappahannock Turnpike Co.*

Since my report to you on the 16th May last it gives me pleasure to be able now to report to you that your road has been steadily and uninterruptedly progressing, with a fair prospect of the whole line to head of navigation being finished by the first of January next. There is no longer a doubt about the ability of each contractor to finish his work according to the strict requirements of the engineer, and they will be required by him so to finish their contracts. The finishing of the grade upon the second section, from Washington to Gaines' Cross roads, has been done under my immediate supervision, assisted by Richard L. Rudasill, and is now nearly completed. The grade upon this section has far exceeded the contract price, but it is the only section upon which there were *cuts* and *fills* of any extent; but the work has been well executed and faithfully done, perhaps much

better than if it had been put to contract, and in the exercise of my duty as supervisor I have endeavored to practise rigid economy.

The condition of the monetary affairs of the company may be seen at a glance in the clear and concise report of W. J. Menefee, the clerk and treasurer of the board; and in this connection allow me to add, that you have in him a most able and efficient officer, whose books are kept in a plain, neat and masterly style, so that any stockholder at all conversant with accounts can see the condition of the affairs of the company at any time.

In pursuance of a resolution passed at your meeting in May, your board of directors have endeavored to secure the completion of your road to Warrenton, and I think I may now safely say that there is every prospect of success. The town of Warrenton has voted a subscription of \$2,000 to be made, and there is every probability that a sufficient amount will be subscribed by individuals in Fauquier to warrant the letting of that portion of the road between this and the first of January; believing it to be an important connection, I have and shall industriously endeavor to secure it. Its advantages I spoke of in my last report.

The 7th and last requisition upon the stock subscribed under the first act of incorporation to the capital stock of \$50,000, has been made, and I cannot too forcibly urge upon you the propriety of prompt and immediate payment, to enable your board to pay punctually the estimates to the contractors, which we are not now able to do for the want of funds—a condition from which we will soon be relieved by a draft we have made on the state, and promptness on your part will insure a full treasury.

Your board has been repeatedly urged to put a covering of dirt upon the metal, but have been restrained from doing so for fear of involving the company in debt. They have, however, let to contract two miles, south of Washington, to Benjamin F. Miller, at \$50 per mile, to be paid out of the tolls, provided there are not funds sufficient to pay him after paying our other liabilities; and the board would probably feel warranted in letting the balance upon the same terms, provided there was an expression of opinion to that effect by the stockholders. A much better plan would be to make a further subscription of stock, and let the company, when the road is completed, go into operation free of debt.

JOHN G. LANE,  
Pres. S. & R. T. Co.

*Sperryville & Rappahannock Turnpike Co.*  
October 3, 1851."

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#### TRASURER'S REPORT—3d Oct. 1851.

In pursuance of the by-laws of the Sperryville and Rappahannock turnpike company, adopted by the stockholders thereof at their first general meeting, and in pursuance of law, I, William J. Menefee, trea-

surer, submit as my report of the state of the funds of said company from the commencement up to the 30th day of September 1851, the following statements, based upon, as the capital stock, the sum of \$50,000, appropriated by the general assembly in the original charter; not embracing the additional capital subsequently appropriated for the purpose of completing the line of the said company's road to the head of navigation on the Rappahannock river, bridging the said river and extending their road to the town of Warrenton in Fauquier county; because the additional stock now being subscribed in the county of Fauquier and by the corporation of Warrenton has not been returned to the board of directors nor been entered on the books of the company; but when that shall be done, the additional stock of \$30,000 will then be embraced in the reports of the treasurer.

The following shew that \$14,529 50 have been received from individual stockholders, that \$17,884 50 have been received from the state, that \$12,115 50 remain unpaid of the commonwealth's subscription, that \$5,845 50 remain unpaid on the subscription made by individuals, that \$29,796 75 have been expended in the construction of the work, that \$291 have been expended in engineering purposes, &c., that \$52,09½ have been expended towards expenses generally, that \$200 have been paid to the president of the company for his first year's salary, that \$1,607 75 have been paid towards land damages on and along the line of said road, that the total amount of receipts is \$32,414, that the amount of disbursements is \$31,947 59½, that there remains on deposit in the Valley bank at Winchester a balance of \$118 95, and that the cash in the treasurer's hands amounts to \$347 45½.

The last of said statements above referred to shews that the board of directors have already made orders on the treasurer amounting to \$3,660 46½, which remain unpaid on the day and year aforesaid.

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*Return of the state of the Sperryville and Rappahannock Turnpike Company from the commencement up to the 30th day of September 1851.*

Capital stock, \$50,000 :

Subscribed by individuals 407½ shares, at \$50 each,	20,375 00
Subscribed by the state 600 shares, at \$50 each, -	30,000 00
Amount of commonwealth's subscription unpaid, - - -	12,115 50
Amount of individual subscription unpaid, - - -	5,845 50
Amount expended in the construction of the work from commencement up to 30th September 1851, -	29,796 75
Amount paid for engineering purposes, &c.	291 00
Amount paid expenses generally, -	52 09½
Amount paid president's salary for first year, - - -	200 00
Amount expended in land damages to date, - - -	1,607 75

Balance remaining in the Valley bank,	118 95	
Amount of cash remaining in the treasurer's hands,	357 45½	
	<u>\$ 50,375 00</u>	<u>50,375 0</u>

*Statement of Receipts and Disbursements from the commencement to the 30th September 1851.*

Receipts :

For capital stock :

Amount received from individuals,	-	14,529 50	
Amount received from the state,	-	17,884 50	
Total receipts,		<u>32 414 0</u>	

Disbursements :

Amount paid for engineering purposes, &c.,		291 00	
Amount paid expenses generally,		52 09	
Amount paid president's salary, first year,		200 00	
Amount expended in land damages, to date,		1,607 75	
Amount expended in the construction of the work, as follows :			
Amount paid J. W. Barnecko, contractor, on section Nos. 1, 2, 3 and 4,		5,422 60	
Amount paid John Jett, contractor, on section No. 2,	-	4,948 00	
Amount paid J. G. Lane, president and general superintendent, on section No. 2,		3,870 56	
Amount paid J. S. Armstrong, contractor, on section No. 5,	-	2,425 00	
Amount paid J. S. Armstrong, as'ee, &c., on section No. 4,	-	2,613 00	
Amount paid B. F. Miller, contractor, on section No. 1,	-	2,015 00	
Amount paid Mat. O'Brien, contractor, on section No. 3,	-	5,990 00	
Amount paid J. B. McAllister & Co., contractors, on section No. 1,	-	1,636 00	
Amount paid John Miller, sub-contractor, on section No. 1,	-	713 00	
Amount paid for carts, tools, &c., for the company,	-	163 59	
Balance remaining in Valley Bank, not checked for,	-	118 95	
Cash in treasurer's hands, on 30th Sept. 1851.	-	347 45½	
		<u>\$ 32,414 00</u>	<u>32,414 0</u>

*Statement shewing the amount of the Orders made by the Board of Directors upon the Treasurer of the Company, which remain unpaid on the 30th day of September 1851.*

Balance due to J. G. Lane, president and superintendent, on section No. 2,	-	-	477 34
Balance due to John Jett, contractor, on section No. 2,			1,330 00
Balance due to John S. Armstrong, contractor, on section No. 5,	-	-	90 00
Balance due to J. S. Armstrong, as'ee &c., on section No. 4,	-	-	400 00
Balance due to Benjamin F. Miller, contractor, on section No. 1,	-	-	400 00
Balance due to John Miller, sub contractor, on section No. 1,	-	-	50 00
Balance due to J. B. McAllister & Co., contractors, on section No. 1,	-	-	740 00
Balance of land damages remaining unpaid,			163 75
Balance of expenses generally remaining unpaid,			9 37½
			<hr/>
Amount of orders by the board upon the treasurer remaining unpaid on the 30th Sept. 1851,	-		<u>\$ 3,660 46½</u>

W. J. MENEFEE, *Treasurer.*

The following resolutions were adopted by the meeting:

*Resolved*, That the following be adopted as one of the by-laws of the Sperryville and Rappahannock turnpike company, to wit: That at each annual meeting a committee of three shall be appointed for the purpose of ascertaining the condition of the said company's works, to enquire into the management of the same and the manner in which their books and financial affairs are kept; whose duty it shall be to report to the next annual meeting the result of such examination and enquiry, and to recommend such measures as in the opinion of the said committee will tend to promote the permanence, value and usefulness of the said works, a reduction of excessive charges and a prohibition of all unnecessary expenses, and an economical, systematic and efficient organization of the superintendence and management of the same.

*Resolved*, That the president and directors of this company take immediate steps to have two inches or more of earth put upon the Sperryville and Rappahannock turnpike road, and that they are hereby authorized to pledge the tolls for the payment of the same after the present liabilities and contracts of the said company are first paid.

On the motion of J. G. Lane, it was decided by a vote of the meeting that the chairman now appoint the committee required by the foregoing by-law; whereupon the chairman appointed R. M. Heterick, A. W. Read and Richard L. Rudasill as such committee as



aforesaid. And, on the further motion of Mr. Lane, the meeting, by a vote of the stockholders present, confirmed the appointment aforesaid.

The first term of the president of this company having expired, the meeting proceeded to elect a president to fill the vacancy, and John G. Lane being in nomination, received the unanimous vote of the stockholders present; and it was thereupon declared that he was duly elected president of the Sperryville and Rappahannock turnpike company for the ensuing term.

Gideon H. Brown and Isham Keith of Fauquier county, were put in nomination to fill the vacancies of G. H. Brown and John Miller, directors, occasioned by their term of service having expired, and the vote being taken it was found that they received the unanimous vote of the meeting; thereupon, it was declared that the said Gideon H. Brown, of Rappahannock, and Isham Keith, of Fauquier, were duly elected directors on behalf of the individual stockholders.

I, W. J. Menefee, clerk of the Sperryville and Rappahannock turnpike company, do hereby certify that the foregoing is a true and correct transcript from the record of the proceedings of the stockholders of the said company at their last annual meeting, held on the 3d day of October 1851.

In testimony whereof, I have hereunto subscribed my name and affixed the seal of said company this 15th day of November in the year 1851.

W. J. MENEFEE, *Clerk.*

The following is a copy of the order made by the president of the Sperryville and Rappahannock turnpike company under the 12th article of the by-laws of said company, together with a copy of the committee's report made under the said order.

“OFFICE SPERRYVILLE AND RAP. TURNPIKE CO.

“I do hereby appoint James Jett and Middleton Miller a committee of two, to examine the books of W. J. Menefee, treasurer of Sperryville and Rappahannock turnpike company, and report their condition in time for the annual meeting on the 3d day of October next, in pursuance of the 12th article of the by-laws.

“JOHN G. LANE, *Pres't.*

“September 10th, 1851.”

REPORT.

OFFICE SPER. AND RAP. TURNP. CO., Nov. 13, 1851.

The undersigned, a committee appointed by the President of the Sperryville and Rappahannock turnpike company under the 12th section of the by-laws of said company, which provides that the pre-



sident shall appoint a committee of two directors to examine the treasurer's books, after they have been balanced, at each annual meeting of the stockholders, to see that the entries are sustained by proper vouchers, report :

That we have carefully examined the treasurer's books and papers this day exhibited and explained to us by him, and we find a full and complete record of all proceedings and every transaction of the company. The books show the amount paid in, as well as the amount due from each and every stockholder, every item of the company's expenditures, to whom and when paid, and all its liabilities at the time of the annual meeting. A regular account has been opened with every stockholder, contractor, and every person having transactions with the company.

We have compared the books with the treasurer's annual report, and find them to correspond to a cent. No money has at any time been paid out except under an order of the board of directors, and we find proper vouchers for every dollar so paid out. We could not well say too much of the accuracy and fidelity with which all the duties devolving on our present secretary and treasurer have been discharged.

M. MILLER,  
JAMES JETT.

True copies—Teste,

M. J. MENEFEE, *Clerk*  
*S. and R. T. Co.*

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## SWIFT RUN GAP TURNPIKE COMPANY.

OFFICE OF THE SWIFT RUN GAP TURNPIKE Co.  
*Fredericksburg, 29th Oct. 1851.*

W. R. DRINKARD, Esq., *Secretary B. Public Works.*

SIR,

As requested in your circular of the 1st September, I enclose herein the annual report of the affairs of this company, a list of stockholders and of the officers' names. I refer you to my letter of 29th Oct. 1847, merely remarking that there has been no change made in the management of or in the extension of the work, which has been sold by the stockholders to the Fredericksburg and Valley plank road.

Very respectfully,

WM. ALLEN, *Sec'y & Treas'r.*

*Return of the state of the Swift Run Gap Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$119,800 :		
Subscribed by individuals 1,394 shares,		
at \$ 50 each, - - -		69,700 00
Subscribed by the commonwealth 82		
shares, at \$ 50 each, - -		4,100 00
Subscribed by Board of public works		
920 shares, at \$ 50 each, - -		46,000 00
Tolls, rents, &c., from commencement of		
work to date, - - -		127,333 20
Due by the company to sundry persons		
for the surplus of their stock which		
was sold for the instalments due there-		
on, - - -		186 23
Dividends remaining unpaid, nothing.		
Error—this sum too much on hand, -		48 68
Amount of commonwealth's subscription		
unpaid, nothing.		
Amount of individual subscription un-		
paid, - - -	541 00	
Due to company other than on account		
of stock, nothing.		
Expended in construction of work	} 185,502 75	
from commencement (1811) to this		
date, - - -		
Expended in land damages for same	} 185,502 75	
time, - - -		
Expended in repairs for same time,		
Property now held by the company,		
nothing.		
Dividends declared from the commence-		
ment, - - -	60,825 45	
Cash on hand 30th September 1851, as		
per statement below, - -	498 91	
	<u>\$247,368 11</u>	<u>247,368 11</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand per last annual report,	
nothing.	
Receipts during the year for capital stock, interest,	
debts, nothing.	
Tolls, - - -	2,771 88
Total receipts, - - -	<u>\$ 2,771 88</u>

Deduct disbursements during the year:				
For improvements and repairs,	-	-	1,034	11
Officers' salaries :				
1 superintendent,	-	-	200	00
1 secretary and treasurer,	-	-	100	00
			<u>300</u>	00
Expenses collecting tolls :				
1 gate-keeper,	-	-	199	99
1 " "	-	-	160	00
			<u>359</u>	99
Other expenses, nothing.				
Debts paid :				
Overdrawing at bank,	-	-	129	43
			<u>129</u>	43
Dividends paid, 30 cents per share				
on 1,476 shares,	-	-	442	80
Tax on dividends,	-	-	6	64
			<u>449</u>	94
Total disbursements,	-	-	<u>2,272</u>	97
Balance money on hand,	-	-	<u>\$ 498</u>	91

Dividends declared 1st of January 1851 payable on the 15th.

WM. ALLEN, Sec'y.

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*List of Officers of the Swift Run Gap Turnpike Company 30th September 1851.*

Anthony Twyman, president ; Jeremiah Morton, William D. Clark, Uriel Terrill, Thomas Scott, James Somerville, John Metcalfe, directors ; Charles R. Brooking, superintendent ; William Allen, secretary and treasurer ; William Bayne, Giles R. Childress, gate-keepers.

TAZEWELL COURTHOUSE AND FANCY GAP TURNPIKE  
COMPANY.

WYTHEVILLE, 1st October 1851.

GENTLEMEN,

I send you herewith our third annual report. The whole line of road is now under contract, and the work progressing very well.

Very respectfully,

Your ob't serv't,

AND. S. FULTON, *Pres't.*

*Return of the state of the Tazewell Courthouse and Fancy Gap Turnpike  
Company for the year ending 30th September 1851.*

Capital stock, \$ 47,000 :			
Subscribed by the counties,	-	-	18,800 00
Subscribed by the Board of public works,	-	-	28,200 00
Amount of subscription unpaid by the Board of public works,	-	-	14,601 71
Amount of subscription unpaid by the coun- ties,	-	-	9,734 47
Expended in construction of the work from commencement to this date, to wit :			
To contractors,	-	-	17,488 35
To engineer and assistants,	-	-	2,960 46
To land damages,	-	-	677 26
To treasurer,	-	-	226 64
To directors,	-	-	261 37
To printing,	-	-	25 27
To repairs,	-	-	45 17
To postage,	-	-	1 33
To cash on hand,	-	-	977 97
			<hr/>
			\$ 47,000 00
			<hr/>
			47,000 00
			<hr/>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand per last annual report,	-	-	-	-	2,191	76
Receipts during the year, to wit:						
For capital stock—am't received from counties,	-	-	-	-	4,965	53
For capital stock—am't received from Board of public works,	-	-	-	-	12,698	29
Total receipts,					<u>19,855</u>	<u>58</u>
Deduct disbursements during the year:						
Officers' salaries—engineer and assistants,					1,760	46
Contractors,	-	-	-	-	15,988	35
Treasurer,	-	-	-	-	226	64
Land damages,	-	-	-	-	677	26
Directors,	-	-	-	-	166	00
Printing,	-	-	-	-	12	40
Repairs,	-	-	-	-	45	17
Postage,	-	-	-	-	1	33
Total disbursements,					<u>18,877</u>	<u>61</u>
Balance money on hand,	-			-	<u>\$ 977</u>	<u>97</u>

By order of the board of president and directors.

WILLIAM H. COOK, *Clerk.*

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THORNTON'S GAP TURNPIKE COMPANY.

*To the Board of Public Works.*

The law makes it my duty to report to you the condition and progress of work on the Thornton's gap turnpike road up to the 1st instant.

The first section, nine miles, has been let for grading at \$ 569 per mile; the second section, of five miles and a fraction, has been let at \$687 50 per mile; the third section has been let at \$ 539 per mile. On the entire route there are four bridges, which have been let as follows: One across Mountain run for \$ 420, one across Devil's run for \$400, one across Blackwater for \$ 550, and one across Hazel river for \$1900. The work is progressing, some two to three miles of the grading done, and three different companies at work.

There has been received into the treasury from individual stockholders \$1,552 50, out of which has been paid \$1,080 63. Nothing as yet has been received from the state.

There has also been let out for grading a stem of about three miles, leading to the F. T. Valley, at \$459 per mile.

I herewith enclose you a list of stockholders up to the 1st instant. As the work has only commenced I think it unnecessary to extend my communication further.

Respectfully yours,

A. F. GILL,  
Pres't T. G. T. Co.

October 10, 1850.

### VALLEY TURNPIKE COMPANY.

*Annual Report of the President and Directors of the Valley Turnpike Company to the Stockholders, October 23d, 1851.*

GENTLEMEN,

We have again the honor of submitting for your consideration the annual report of this company. First, the debt reported by the treasurer on the 30th September 1850, subject to a credit for the cash and assets then on hand and the stock subscribed for, remaining unpaid, was

			30 201 85
Amount of interest paid within the year,	-	-	1,979 94
			<hr/>
			32,181 79

To which add the following items, viz :

Aggregate am't of repairs within the year,	-	9,873 35	
“ “ paid officers' salaries,	-	1,350 00	
“ “ stationery and printing,		5 00	
“ “ incidental expenses,	-	54 43	
Aggregate am't paid expenses of directory,	-	127 50	
“ “ gate-keepers salaries,	-	1,298 23	
“ “ law expenses,	-	63 13	
“ “ toll-gates, houses, lands, &c.		887 41	
Current expenses of the year,	-	<hr/>	13,659 05
			<hr/>
			45,840 84

From which deduct amount paid within the year, viz :

For guarantees and mortgage bonds,	-	11,408 32	
For old company bonds,	-	195 05	
For dividends due to individuals,	-	156 75	
For interest,	-	1,979 94	
For current expenses of the year,	-	13,659 05	
		<hr/>	27,399 11
			<hr/>
Amount of outstanding debt,	-	-	18,441 73

Brought forward,	18,441 78
Against which there is a balance on hand, viz:	
Cash in the hands of the treasurer as reported,	4,816 18
Amount of debt, after disbursing cash on hand,	13,625 55
Assets other than money in the hands of the treasurer, viz:	
Amount of judgment <i>vs.</i> estate of Jas. Arthur, for stock, - - -	1,000 00
Amount in the hands of commissioners and others, for stock, - - -	652 75
Amount uncurrent funds received at the gates,	45 00
Amount for stock subscribed, remaining unpaid, - - - -	3,823 13
	<u>5,520 88</u>
Which, if available, would leave a nett debt of	<u>\$8,104 67</u>

This, however, is exclusive of an unsettled claim on the part of the Messrs, Pennybackers, heretofore reported.

Second.—Amount of tolls received by the treasurer within the year, - - - -	22,138 67
From which deduct current expenses of the year, -	13,659 05
Leaves a balance of - - -	8,479 62
From which deduct amount of interest paid within the year, - - - -	1,979 94
To which add amount of tolls due by individuals, about	500 00
And it will shew the nett profits of the year to be -	<u>\$6,999 68</u>

Which, considering the small amount of wagonage within the year, consequent upon the low price of flour, fully realizes the expectations of the board. The light travel has increased since last year, but not to an extent sufficient to make up for the falling off of the heavy travel, for the reason above stated.

Third.—Amount of tolls received the year ending 30th September 1850, - - -	23,761 11
Amount of tolls received the year ending 30th September 1851, - - -	22,138 67
Amount of tolls due by individuals, about	500 00
	<u>22,638 67</u>
And it will shew a diminution of the revenue for the year of - - - -	<u>\$1,122 44</u>

Amount of tolls received at each gate for the past year, was :

S. Hillman,	Gate No. 1,	-	-	2,469 91
J. G. Mires,	" 2,	-	-	1,702 97
A. Hull,	" 3,	-	-	1,615 62
C. Spengler,	" 4,	-	-	1,429 90
C. C. Mauser,	" 5,	-	-	1,328 16
P. Supinger,	" 6,	-	-	1,337 10
J. F. Hockman,	" 7,	-	-	1,243 64
G. Mewmaw,	" 8,	(double up)		1,576 97
W. Wickes,	" 9,	{ " down)		1,635 97
E. Wilkins,	" 10,	{ " up)		1,113 06
J. Willard,	" 11,	{ " down)		991 03
W. W. Gibbs,	" 12,	-	-	648 27
B. Burgess,	" 13,	-	-	529 79
C. White,	" 14,	-	-	462 50
G. Grimer,	" 15,	-	-	777 60
E. Tapp,	" 16,	-	-	192 87

Amount of tolls received at the gates,	-	19,055 36
" " " of stage proprietors,	-	2,880 00
" " due from individuals other than at the gates, -	-	202 94
Add amount of tolls due from individuals, about	-	500 00

Aggregate tolls of the year, - - \$22,638 67

Fourth.—Within the past year a toll-gate has been established near Staunton on the fractional section of two miles, under the supervision of a committee appointed for that purpose, at a cost of \$ 875 30 for lands, buildings, &c., which has increased the expenses of the year that amount.

Fifth.—There has been applied within the past year 17,173 perches of metal, averaging 186 $\frac{3}{4}$ perches to the mile, at an average cost of 55 $\frac{3}{4}$ cents per perch, making a total amount for metal of	-	-	9,587 35
For extra raking,	-	-	3 50
" filling ruts,	-	-	7 25
For ordinary materiel, extra,	-	-	2 00
For repairing bridges,	-	-	165 48
" culverts and hollow ways,	-	-	25 00
" embankments,	-	-	54 62
For ditching, extra,	-	-	1 00
For masonry,	-	-	20 00
For toll-houses embraced in estimates for repairs,	-	-	7 15

Exhibiting a total amount of repairs as before stated, \$ 9,873 35

Sixth.—Within the past year the uncovered bridge across Mill creek at Mount Jackson has given way, from natural decay, and a



covered bridge upon the arched principle is now being built, at a cost of \$725, exclusive of some small amount for extra masonry, not estimated. The other bridges on the line are in good condition, and the general face of the road never was finer. With an ample supply of materiel on hand, it is hoped to keep it up the coming winter.

Seventh.—In March last Mr. John Wright, our worthy and most valuable superintendent upon the lower section of the road, died, and Mr. C. G. Turley, the superintendent upon the upper or western section, was substituted in his stead for the remainder of the year, whose efficiency has given great satisfaction to the board, and we believe to the stockholders generally.

In conclusion, we regret to say there was no annual meeting of the stockholders to-day, notwithstanding the notice given through the several newspapers along the line, in consequence, we suppose, of the general elections being on the day fixed by law for the annual meetings of the stockholders of this company; in consequence of which, the board will be convened at an early day.

All of which is most respectfully submitted.

JOHN W. RICE,  
Pres. V. T. Co.

*To the President and Directors of the  
Board of Public Works, Richmond, Va.*

*Return of the state of the Valley Turnpike Company for the year ending  
the 30th September 1851.*

Capital stock 17,000 shares of \$ 25 each, 4 525,000 :			
Subscribed by individuals 6,400 shares,	160,000	00	
Subscribed by Board of public works			
10,000 shares, at \$ 25 each,	-	265,000	00
			425,000 00
Tolls from the commencement,	-		185,706 68
Interest “ “	-		1,292 20
Law “ “	-		40 90
Loan from Valley Bank,	-		3,000 00
Bonds guaranteed by the state,	-		20,874 00
Bonds secured by mortgage,	-		13,916 00
Amount due individuals on old bonds,			944 70
“ “ dividends,			1,005 90
Due by individuals for stock sub-			
scribed, - - - -	1,529	25	
Due by Board of public works for stock			
subscribed, - - - -	2,293	88	
Expended for construction,	-	392,652	28
“ repairs, - - - -	-	120,086	63

Expended for survey and location,	-	5,855	45
“ officers’ salaries,	-	21,760	81
“ stationery and printing,	-	759	59
“ land damages,	-	8,290	07
“ incidental expenses,	-	5,447	68
“ interest,	-	30,647	07
“ law,	-	1,468	15
“ toll-houses, gates, lands, &c.	-	2,596	31
“ gate-keepers’ salaries,	-	11,394	36
“ expenses of directory,	-	490	00
“ loan from Valley Bank,	-	3,000	00
“ property, instruments, &c.	-	226	50
Amount of loss on state scrip, &c.	-	5,282	71
“ paid on guaranteed and mortgage bonds,	-	18,297	87
Amount paid on old bonds,	-	3,571	08
“ dividends to commonwealth,	-	5,252	66
“ dividends to individuals,	-	2,163	50
Amount due paid on dividends to individuals,	-	1,005	90
Amount due paid on old bonds,	-	944	70
Balance on hand in cash and assets,	-	6,513	93
		<u>\$ 651,780</u>	<u>38</u>
			<u>651,780 38</u>

NOTE.—There has been no material change in the list of stockholders since the last list furnished.

J. S. CALVERT.  
Treas. V. T. Co.

*Statement of Receipts and Disbursements of the Valley Turnpike Company  
for the year ending 30th September 1851.*

Balance on hand 30th September 1850, as per report,	11,774	37
Add receipts within the year, viz :		
Tolls received,	22,138	67
Total,	33,913	04
Deduct disbursements within the year, viz :		
For officers’ salaries,	1,350	00
“ stationery and printing,	5	00
“ incidental expenses,	54	43
“ interest,	1,979	94
“ repairs,	9,873	35
“ toll-houses, lands, rents, &c.	887	41
“ expenses of directory,	127	50
“ gate-keepers’ salaries,	1,298	23

For law expenses, - - -	63 13	
“ guaranteed and mortgage bonds, - - -	11,408 32	
“ old company bonds, - - -	195 05	
“ dividends to individuals, - - -	156 75	
	<u>          </u>	27,399 11
Balance on hand in cash and assets,		<u><u>\$ 6,513 93</u></u>
Cash in the hands of the treasurer,	4,816 18	
Judgment <i>vs.</i> the estate of Jas. Arthur, for stock, - - - - -	1,000 00	
Amount in the hands of commissioners and others, for stock subscribed and cer] tified as paid, - - - - -	652 75	
Uncurrent funds received at the gates,	45 00	
	<u>          </u>	<u><u>\$ 6,513 93</u></u>

All of which is most respectfully submitted.

J. S. CALVERT,  
*Treas. V. T. Co.*

*To the President and Directors of the V. T. Co.*

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## WARM SPRINGS AND HARRISONBURG TURNPIKE COMPANY.

J. BROWN, JR., Esq.

DEAR SIR,

Annexed you will find a report of the financial condition of our company the past year, from which you will find we have declared a dividend of 4 per cent. on the capital stock of the company, made payable on the 1st of Nov. next. You will also find enclosed a list of the stockholders in our company.

The whole road has been completed; the cost per mile something over five hundred dollars; the length of the improvement 58½ miles; point of commencement Harrisonburg, and the terminus near the Bath Alum springs.

Yours, very respectfully,

M. HARVEY EFFINGER.

NEAR HARRISONBURG, Nov. 3d, 1851.

J. BROWN, JR., ESQ.

Within you have the report of the secretary and treasurer of the Warm springs turnpike company, which will give the financial condition. Our road has become from the travel very flat; we have for the coming year increased the expenses of repairs, and shall have the road filled up in the centre and ditches will be opened, and I have no doubt very much improve the condition of our road.

Yours, &amp;c. most respectfully,

EDWARD H. SMITH,  
P. W. S. & H. T. Co.

*Return of the state of the Warm Springs and Harrisonburg Turnpike Company for the year ending 1st of October 1851.*

Capital stock, \$ 30,000 :			
Subscribed by individuals,	-	-	18,000 00
Subscribed by Board of public works,	-	-	12,000 00
Paid by individuals,	-	-	18,000 00
Paid by Board of public works,	-	-	<u>12,000 00</u>
Balance in hands of treasurer, and due from individuals, as per last annual report,	-	627 71	
Amount of tolls received from 1st Oct. 1850, to 1st Oct. 1851,	-	2,437 53	
		<u>          </u>	3,065 24
To paid for repairs on road and bridges from 1st Oct. 1850, to 1st Oct. 1851,		694 38	
To paid for collection of tolls,	-	222 77	
To dividend of 4 per cent. on capital stock, made payable 1st Nov. 1851,		1,200 00	
Incidental expenses paid during present year,	-	50 13	
Expenses of secretary, treasurer, directory, &c.	-	227 21	
		<u>          </u>	2,394 49
Balance in hands of treasurer, and due from individuals,	-		<u>\$ 670 75</u>
In hands of treasurer,	-	553 51	
In former treasurer's hands, (disputed,)		97 41	
Due from Rogers & Newman,	-	19 83	
		<u>          </u>	<u>\$ 670 75</u>

Respectfully submitted.

Oct. 25th, 1851.

M. HARVEY EFFINGER,  
Sec'y & Treas'r.

*Officers of the Warm Springs and Harrisonburg Turnpike Company.*

Ed. H. Smith, president; Ro. M. Kyle, John A. Herring, Peter Heneberger, Wm. Guy and Jas. A. Cochran, directors; M. Harvey Effinger, secretary and treasurer. Compensation of president and directors—two dollars per day for services rendered, and all reasonable expenses. Compensation of secretary and treasurer—fifty dollars the past year, and all reasonable expenses.

**WELLSBURG AND WASHINGTON TURNPIKE COMPANY.**

*Return of the state of the Wellsburg and Washington Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$17,858 33:		
Subscribed by individuals 429 shares, at \$ 25,		10,725 00
Subscribed by commonwealth 285½ shares,		7,133 33
Tolls from commencement of work to this date,		13,735 74
Debts due by the company, nothing.		
Dividends remaining unpaid, - - -		17 93
Amount of commonwealth's subscription unpaid, - - - -	62 31	
Amount of individual subscription unpaid,	593 01	
Debts due to company other than on account of stock, - - - -	80 05	
Expended in construction of the work from commencement of the work (1823) to this date, - - - -	17,858 33	
Expended in repairs for same time, -	11,362 94	
Property now held by company, -	400 00	
[Two toll-gates and two frame houses for keepers.]		
Dividends declared from commencement,	957 05	
Cash on hand 30th September 1850, as per statement below, - - -	298 31	
	<u>\$ 31,612 00</u>	<u>31,612 00</u>

*Statement of Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report,	-	-	-	-	298 31	
For tolls, including debts for tolls,	-	-	-	-	934 90	
				Total receipts,	————	1,233 21
Disbursements during the year:						
For improvements and repairs,	-	-	-	-	1,141 01	
For officers' salaries, viz:						
Superintendent,	-	-	-	-	20 00	
Clerk,	-	-	-	-	20 00	
Advertising,	-	-	-	-	1 00	
					————	41 00
Toll receivers' compensation—There are two gates, each keeper is allowed \$8 per month, which is paid to them monthly out of tolls received.						
Money on hand,	-	-	-	-	51 20	
					————	————
					<u>\$1,233 21</u>	<u>1,233 21</u>

From extensive repairs lately made, the road now is in complete good order its whole length, namely, 6 miles and 48 perches.

A list of the stockholders, with the number of shares standing to each name, and the amount due from each, is herewith enclosed. It is respectfully requested that this list may be preserved, as from the utter want of value of the stock, no transfer will be made; it requires all the tolls to keep the road in repair; therefore no dividend is expected.

Arrangement for keeping the works in repair: A superintendent who owns and lives on a large farm through which the road is taken, visits the road almost daily, and has repairs made as occasionally required.

A map of the improvement has some years ago been furnished.

*List of the Officers of the Company.*

John Miller, president, and director for the commonwealth; James W. Miller, Joseph Applegate, Thomas Grimes, Joseph Gist, directors; John Hinkson, in place of Wm. Hinkson, deceased, who was a late director.

Joseph Applegate, superintendent, salary \$20 per annum; William McCluney, clerk—same salary; John M. Wells, treasurer, in place of Danfd. Brown, resigned—salary not fixed until first annual meeting of the directors; two gate-keepers, at \$8 per month each.

Respectfully submitted.

JOHN MILLER, *Pres't.*

W. McCLUNEY, *Clk.*

## WELLSBURG AND BETHANY TURNPIKE COMPANY.

OFFICE WELLSBURG AND BETHANY TURNPIKE  
COMPANY, November 7th, 1851.

JAMES BROWN, JR.

DEAR SIR,

Herewith is enclosed a statement shewing the cost for the construction of the work from the commencement to date. Also a list of stockholders, with the number of shares; amount paid and amount due; list of president and directors, managers, gate-keepers, &c.; all of which have been made to comply with the circular you sent as nearly as possible.

There are yet some unsettled bills. The largest is with one of the contractors, who is claiming considerable more for extra work than the company are willing to pay. They hope to get the matter compromised soon by allowing some of his extras. The road is now in beautiful order, but no doubt when winter sets in it will cut up in places. They have tried the experiment of graveling some portions, and, should it stand well through the winter, will continue it in the spring. It can be done much cheaper than stoning and makes a much smoother road.

Very respectfully, your obedient servant,

JOS. GIST, *Treasurer.*

OFFICE WELLSBURG AND BETHANY TURNPIKE  
COMPANY, November 6th, 1851.

Capital stock, \$27,000—which is not all taken:

Subscribed by individuals 178 $\frac{1}{2}$ shares,		
at \$ 50,	-	8,937 50
Subscribed by commonwealth 269 $\frac{1}{8}$ shares,		
at \$ 50,	-	13,406 25
Tolls received from August 2d, 1851, to date,	-	225 19
Received for lumber sold,	-	16 50
Due by the company to one contractor,	-	589 89
Amount of individual subscription unpaid at date,	780 46	
Amount of commonwealth's subscription unpaid at date,	1,240 25	
For construction of work, &c., from commencement to date,	18,524 13	
Cash on hand,	2,630 49	
	<u>\$ 23,175 33</u>	<u>23,175 33</u>

*Receipts and Expenditures for the Wellsburg and Bethany Turnpike from commencement of work to date.*

For capital stock :

Amount received from individuals,	-	8,157 04
Amount received from commonwealth,	-	12,166 00
Amount received from tolls,	-	225 19
Amount lumber sold,	-	16 50

Deduct :

Disbursements same time, as per statement annexed,	-	18,524 13	
Less by amount due contractor,		589 89	
		<hr/>	17,934 24
Balance cash on hand,			2,630 49
			<hr/>
			\$ 20,564 73 20,564 73
			<hr/>
Balance cash on hand,			\$ 2,630 49
			<hr/>

By order of the board of directors.

JOS. GIST, *Treasurer.*

*Statement of Expenditures for the construction of the Wellsburg and Bethany Turnpike from commencement of work to this date.*

WELLSBURG, Nov. 6th, 1851.

For bridge No. 1, double track, over Buffalo creek,		3,985 59
“ 2, single track,	“	1,755 78
“ 3, “	“	1,861 42
“ 4, Swan’s Wing run,	-	102 94
For grading 1,931 <sup>8</sup> / <sub>10</sub> poles of road, at \$ 3 <sup>1</sup> / <sub>2</sub> ,	-	6,761 30
53 culverts,	-	956 57
filling at bridges,	-	93 85
riprap walls,	-	30 35
322 <sup>2</sup> / <sub>10</sub> perches of limestone of contractor,	-	161 10
arching tunnel,	-	623 80
surveying and measuring road,	-	143 37
advertising notices, &c.	-	6 00
toll-houses,	-	326 44
land damages,	-	100 00
stoning and graveling parts of road,	-	204 00
repairs, hauling stone, embankments, clearing slips, tools, dressing up, &c.	-	1,411 62
		<hr/>
		\$ 18,524 13
		<hr/>

Of the above there is admitted by the company to be due to one of the contractors not yet settled or paid, \$ 589 89.



**WEST MILFORD AND NEW SALEM TURNPIKE COMPANY.**

*Return of the state of West Milford and New Salem Turnpike Company  
for the year ending 30th September 1851.*

Capital stock, \$ 12,000 :			
Subscribed by individuals 153 shares, at \$ 25 per share,		3,825	00
“ commonwealth 229½ “ “		5,737	50
Amount of commonwealth's subscription unpaid,	- - - -	2,799	93
Amount of individual subscription unpaid,		1,458	93
Expended in construction of the work from commencement (29th July 1850) to this date :			
Locating,	- - - -	342	25
Printing,	- - - -	32	11
Postage,	- - - -	1	95
Books and stationery,	- - - -	2	37
Draft for bridge,	- - - -	5	00
Clerk and treasurer,	- - - -	300	00
Making road,	- - - -	3,802	51
Superintendent,	- - - -	150	00
Cash on hand 30th Sept. 1851,	- - - -	667	45
		<u>\$ 9,562</u>	<u>50</u>
			<u>9,562 50</u>

*Statement of Receipts and Expenditures within the year.*

Amount received from individual stockholders,	- - - -	2,366	07
Amount received from Board of public works,	- - - -	2,937	57
Deduct disbursements during the year :			
For locating,	- - - -	342	25
“ printing,	- - - -	32	11
“ postage,	- - - -	1	95
“ books and stationery,	- - - -	2	37
“ draft for bridge,	- - - -	5	00
“ clerk and treasurer, (\$ 300 per year,)		300	00
“ superintendent, (\$ 200 per year,)	- - - -	150	00
“ making road,	- - - -	3,802	51
Cash on hand,	- - - -	667	45
		<u>\$ 5,303</u>	<u>64</u>
			<u>5,303 64</u>

By order of the board of president and directors.

R. JACKSON, *Clerk.*

Length of road, 29½ miles; the contractors to keep the road in repair for one year from the reception of the same.

A. L. Patton, president; H. J. Lynch, Blackwell Jackson, John Kee, John D. Smith, Stephen Bassel, directors; R. Jackson, clerk and treasurer, \$ 300 per year; E. W. Patton, superintendent, \$ 200 per year.

## WESTON AND GAULEY BRIDGE TURNPIKE COMPANY.

*To the Stockholders of the Weston and Gauley Bridge  
Turnpike Co. in General Meeting assembled.*

The president and directors of this company make the following as their third annual report :

That since the last annual meeting the directors have let to contract 32½ miles, at an expense of \$ 10,395, for construction, of which five miles are north of Summersville, at \$ 1,964, and ten miles south of Summersville, at \$ 4,396, which two portions are to be completed by the 1st of November next ; 12 miles south of Sutton, at \$ 4,361 50, and 5 miles south of Summersville, at \$ 2,017 50, which two portions are to be completed by the 1st of November 1852—making 20½ miles in Nicholas co., at \$ 8,377 50, and 12 miles in Braxton, at \$ 4,361 50. The directors have prosecuted the work to the full extent of the means at their command. From the report of the superintendent of this road it appears that the treasurer of this company has collected the sum of \$ 10,008 74 from the private stockholders, &c., and the sum of \$ 15,013 11 from the Board of public works, making an aggregate sum of \$ 25,021 85, and that the treasurer paid out \$ 7,239 62 in 1850, and \$ 17,038 91 in 1851, making the aggregate sum of \$ 24,278 53. Of which it appears that there has been paid :

For constructing 19 miles in Lewis,	-	-	\$ 5,150 62
“ 25 “ Braxton,	-	-	8,457 60
“ 35 “ Nicholas,	-	-	8,225 00

For contingent expenses, viz :

Location,	-	-	-	1,455 36
Superintendence,	-	-	-	481 64
President, directors, &c.	-	-	-	509 31
				<u>2,446 31</u>

The treasurer having collected \$ 14,912 95 in 1851, his commission on that amount is \$ 111 84, making the total expenses \$ 24,389 37, leaving a balance in the treasury of \$ 631 48. From the report of the superintendent it appears that the road under contract is in a rapid state of construction.

All of which is respectfully submitted.

Oct. 1st 1851.

FELIX SUTTON, *Pres't.*

At a meeting of the stockholders of the Weston and Gauley bridge turnpike company, held at the law office of J. N. Camden in the town of Sutton on the 1st day of October 1851 :

*Resolved*, That George W. Jackson, Morgan Dyer and Wm. Morris be a committee to examine the account of the expenditures of the president and directors of this company.

Whereupon, the president presented in open meeting, a statement of the finances of the company, which was examined by said committee, approved and ordered to be filed, and a copy of the same, together with a copy of this resolution were on motion of the state proxy, ordered to be forwarded to the Board of public works as the annual report of the stockholders of this company to the Board of public works.

A copy—Teste,

JOHN P. BYRNE, *Clerk of Board.*

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## WHITE AND SALT SULPHUR SPRINGS TURNPIKE COMPANY.

UNION, 10th Nov. 1851.

JAMES BROWN, JR.

DEAR SIR,

The treasurer of the White and Salt Sulphur springs turnpike company has not been enabled to make out his report for the year ending 30th September 1851 agreeably to the prescribed form, and asks you to do it for him.

Cash on hand 1st Oct. 1850, after paying dividends,	-	\$ 99 54
Total receipts during the year 1851,	- - -	1,099 72
Debts due on bond,	- - -	4 47
Debts due on account,	- - -	128 32
Total expenditures during the year,	- - -	<u>449 26</u>

If from the above data you can and will make out the account according to form, you will very much oblige

HENRY ALEXANDER, *Pres't.*

A dividend of 7½ per cent. was declared 1st October, and no surplus on hand.

For improvements, &c.	- - -	317 60
For officers' salaries,	- - -	40 16
For collecting tolls,	- - -	91 50
		<u>\$449 26</u>

JAMES BROWN, JR., *Second Auditor* :

Annexed you will receive an account of receipts and expenditures of the White and Salt Sulphur turnpike company for the year ending the 30th of September 1851.

This report was delayed longer than was required by *instruction*, owing to some error which the clerk could not and has not been able to detect in the general account. (That was why I wrote to you some time ago concerning it.) The clerk was compelled (in order to balance accounts) to force the amount of receipts and expenditures, not being able (with the assistance of others) to do otherwise.

The amount on hand lacked about \$7 00 of being sufficient to declare a dividend of  $7\frac{1}{2}$  per cent., and the directors ordered that amount to be taken from tolls of the next year, which will account for the dividend having taken the exact amount that was on hand. The profits of the road would not have been sufficient to have declared 5 per cent., if it had not been for debts collected, (heretofore due,) which enabled the board of directors to declare the dividend of  $7\frac{1}{2}$  per cent. The road is now in good order. The road is  $20\frac{1}{2}$  miles long, commencing near the Greenbrier bridge on the Kanawha turnpike road, and terminating at the Salt Sulphur springs in Monroe county. The general course of the road is about south  $23^{\circ}$  west. I think a map was furnished some years since; (of this I am not certain.) There are two toll-gates. The compensation to gate-keepers is 10 per cent. on the money received. The road is kept in repair by hired hands. Henry Alexander is the president of the road. Isaac Caruthers, William Erskine, Allen T. Caperton, Augustus A. Chapman and Benjamin F. Steele, are the directors. John Hutchinson is secretary and James H. Alexander treasurer. There is no superintendent or other agent employed on the road. There has been no general meeting of the stockholders for many years, as the directors own all the individual stock except twenty shares.

HENRY ALEXANDER, *Pres.*

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*Return of the state of the White and Salt Sulphur Springs Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$10,000 :			
Subscribed by individuals 120 shares, at \$50 each,	-		6,000 00
Subscribed by the commonwealth 80 shares, at \$50 each,			4,000 00
Tolls, rents, and other profits from commencement to date,			13,542 12
Dividends unpaid,	-	-	750 00
Due on bond,	-	-	4 47
Due on open account,	-	-	128 32

Construction of the			
the commencement			
to date,	-	9,327 00	
in land,	-	673 00	
			10,000 00
led in repairs for same time,	-	5,159 33	
ity now held by the company,	-	50 00	
dividends declared from the commence-			
ment,	-	-	8,200 00
Cash on hand,	-	-	750 00
			<u>\$24,292 12</u>
			<u>24,292 12</u>

*Statement of Receipts and Expenditures during the year.*

Balance of money on hand, per last annual		
report,	-	843 82
Add receipts during the year, viz :		
Tolls, rents and other profits,	-	805 43
Debts received,	-	300 01
Deduct disbursements during the year :		
For improvements and repairs,	-	317 60
Officers' salaries—president \$ 2 per day,		
directors \$1 50, clerk \$ 2, treasurer one		
per cent. state tax 1½ per cent.	-	40 16
Expenses collecting tolls,	-	91 50
Dividends paid,	-	750 00
Balance of money on hand,	-	750 00
		<u>\$1,949 26</u>
		<u>1,949 26</u>

Dividend declared of 7½ per cent. the 30th day of September 1851,  
payable forthwith.

JOHN HUTCHINSON, *Clerk.*

**WINCHESTER AND BERRY'S FERRY TURNPIKE  
COMPANY.**

The president and directors of the Winchester and Berry's ferry  
turnpike company, in making their annual report to the Board of pub-  
lic works, beg leave respectfully to state :

That one section of the road, nearest to Winchester, has been com-  
pleted for a short time, and a toll-gate has been erected thereon, and  
the company is now in the receipt of tolls from that section ; and they  
hope to complete the balance of the road, terminating at the Shenan-  
doah river at Berry's ferry, by the 1st of January next.

We have heretofore sent a list of the private stockholders, and the board is not aware of any change in the list.

A map of the improvement has been furnished.

The length of the road is nearly fourteen miles, of which five miles are finished and the remainder in a state of forwardness.

The average cost per mile cannot be accurately stated at present, but it will be about \$1,650.

The officers of the company are, president, treasurer, secretary and five directors, six engineers and one gate-keeper. The engineer will soon be dispensed with.

The engineer receives \$3 per day whilst actually engaged. The president and the other officers receive no compensation.

The gate-keeper is allowed \$100 per year and the use of the house and lot attached to it.

The report as to the finances of the company includes all its transactions from the commencement, as but little was done before the commencement of the present year.

The return accompanies this report.

A copy—Teste,

P. WILLIAMS Sec'y.

Oct. 25th, 1851.

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*Officers.*

John E. Page, president; Jacob Baker, David H. McGuire, Robert C. Randolph, David Hollingsworth, Philip Williams, directors; George W. Scerror, treasurer; P Williams, secretary; Washington Blythe, engineer.

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*Return of the state of the Winchester and Berry's Ferry Turnpike Company from the commencement of the work to the 30th Sept. 1851, inclusive.*

Capital stock, \$ 25,000 :		
Subscribed by individuals 200 shares, at \$ 50		
per share, - - - - -		10,000 00
Subscribed by commonwealth 300 shares, at		
\$ 50 per share, - - - - -		15,000 00
		<hr/>
		<u>\$ 25,000 00</u>

Amount of individual subscription unpaid,	3,015 00
Amount of commonwealth's do.	4,597 50
Expended in construction of the road, viz :	
Cash paid to contractors,	15,607 88
“ to engineer, chain carriers, markers, &c.	352 75
“ incidental expenses,	41 75
“ land damages,	498 62
“ toll-house,	343 29
“ interest on bank loans,	30 48
	<hr/> 16,874 77
Cash on hand,	512 73
	<hr/>
	<u>\$ 25,000 00</u>
Receipts from the Board of public works,	10,402 50
Receipts from individuals, - -	6,985 00
Money borrowed from banks, - -	4,625 25
	<hr/>
	22,012 75
Deduct disbursements :	
Cash paid to contractors,	15,607 88
“ to engineer, chain carriers, markers, &c.	352 75
“ incidental expenses,	41 75
“ land damages,	498 62
“ toll-house,	343 29
“ interest on bank loans,	30 48
“ to banks,	4,625 25
	<hr/> 21,500 02
	<hr/>
Cash on hand Sept. 30th, 1851,	<u>\$ 512 73</u>

## II. RAILROAD COMPANIES.

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### BLUE RIDGE RAILROAD.

#### ANNUAL REPORT.

ENGINEER'S OFFICE, Nov. 4, 1851.

To the President and Directors Board P. Works.

GENTLEMEN,

During the past year a large amount of work has been done on this railroad, as your honorable board has had occasion to witness in the several examinations you have made.

The division west of the Blue Ridge, which had not been put under contract at the same time with the eastern side, because it had been deemed premature until the tunnel approached to its completion, there being then no immediate expectation of an extension westwardly, received new importance from the construction undertaken since, of the distance between Waynesboro' and Staunton, and was consequently contracted for in December last. This division embraces three miles, including the bridge over the South river and a deep cut at Waynesboro', necessary to supply materials over the bridge for the long embankment across the low, flat bottom on the east side of the river, which does not afford excavation enough for the said embankment. The work here has been prosecuted with great energy under the immediate direction and management of two of the contractors, Messrs. R. L. Walker and H. L. Gallaher. The masonry of the bridge is up and well built, but the superstructure cannot be raised until after the season for cutting down timber. The long embankment is in a considerable state of progress, but cannot be completed near the river until a bridge has been constructed to haul materials over from the Waynesboro' side. This constitutes the 11th section. The 10th section will be entirely completed this month; the 9th will soon follow.

Next in order comes section No. 1, which comprises the main tunnel, which has all along been prosecuted with great activity and skill, by Messrs. Kelley and Larguey, against more than usual difficulties; the rock, particularly on the east side, being excessively hard. They have now penetrated an aggregate distance on both sides of 755 feet, viz: 295 on the east, and 460 on the west side. The rock, notwithstanding all the reports to the contrary, has been from the beginning exactly the same, namely, craggy and rather unsafe, though hard on the west side, and as hard as can well be conceived at the eastern end.



As regards the probable time of completion, no exact computation can be predicated on former progress. Many circumstances may hasten it, while others (as yet unforeseen) may delay it. The work had advanced 96 feet during the last month, under circumstances the permanency of which there appears to be no reason to doubt. If so, the tunnel may be through in three years. Its ultimate completion, however, will depend on the extent to be arched in. So far, the western opening would be unsafe without it, while the eastern one would stand firm without this protection. Indications, however, are in favor of a more secure roof very shortly on the west side.

On the second section east of the tunnel, the work has been heavy, but is approaching its completion; it has been materially increased by immense slides of rock which occur even with slopes under which earth itself would stand. Though common over the Alleghany, this is the only locality where I have met with them on this side; they take place more or less on the eastern division down to Blair Park, where they cease.

The 3rd section is very nearly finished.

The 4th section includes the heavy embankment across Robinson's hollow and the adjacent deep cuts; a great deal remains here yet to be done. The excavation being mostly through rock, and only to be approached from the ends of each deep cut, can be worked only by a limited force, and will consequently require more time than excavations through more level ground.

On the 5th section the 2d tunnel occurs: its excavation has proved, contrary to expectations, excessively bad and dangerous, requiring the protection of heavy timbering all along, and consequently also arching the whole distance, 750 feet, an operation which will begin next spring after the breaking up of frost.

The 3d tunnel in the 6th section is about of the same character, but much shorter: it is now about 200 feet in, being one-half of its length.

The 7th and 8th sections are in a state of forwardness, which ensures their completion at an early period next year.

I speak, however, of the completion, without reference to the limitation of the annual appropriation to \$100,000. But I beg to submit respectfully to your consideration this important matter; for, unless the restriction be removed, the prosecution of the work must necessarily be delayed, as it is evident that next year an increased demand for funds will take place on this work.

1st. For the regular operations of construction as heretofore.

2d. To meet the just claims of the contractors for the 20 per cent. reserved, as every section and contract is completed, which on all the contracts will itself exceed \$100,000.

3d. To pay for iron rails and the laying of the track in connection with the Central railroad on either side of the mountain.

The cost of the work up to the 1st of October, was as follows:

1st section, over one mile, including main tunnel,	48,387	06
2d do. one mile east of the mountain, far advanced,	27,294	40
3d do. one mile, nearly finished,	-	13,711 11

4th	do.	one mile, much remains to be done,	-	26,092	53
5th	do.	one mile, including 2d tunnel,	-	44,369	83
6th	do.	one and one-fifth mile, comprising 3d tunnel,		26,104	49
7th	do.	one and one-eighth mile, greater part done,		23,294	36
8th	do.	one and three-fourths mile, nearly completed,		20,605	97
9th	do.	one mile west of the mountain,	-	8,783	15
10th	do.	one mile west of the mountain, almost finished,		7,883	15
11th	do.	one mile, ending at Waynesboro', including the bridge,	- - - -	13,609	81

Total cost so far, \$ 260,135 87

Which is still considerably short of the estimate, though it is apparent that it will be exceeded to an extent, however, less than might be apprehended from the following (mostly unforeseen) causes, which have operated unfavorably :

1st. The big tunnel, as is well known, had to be relet at an advanced price.

2d. As regards new contracts, the original price for labor, which was only 75 cents per day, has risen since to 87½ cents, and even one dollar.

3d. Extensive slides of rock, which, characteristic of the mountains west of the Alleghany, were unexpected here, have taken place to a considerable amount.

4th. All sorts of materials, lime, timber, and even building stone, are deficient here, and had to be procured from a considerable distance.

Finally, the smaller tunnels, unlike those that have been constructed in similar regions in neighboring states, present extraordinary difficulties. They must be perforated by blasting, and yet will not sustain themselves without heavy timbering and final arching.

All these disadvantages, however, are counterbalanced in part by occasional unexpected facilities in some excavations, which prove more favorable than appearances led to suppose.

Allow me, in conclusion, gentlemen, to call your attention to the subject of land damages which remain unsettled, and are likely to be so, until the question relative to the intention and application of the law has been determined by competent authority—there being a diversity of opinion on the subject, and the counties having indicated no disposition to take any action in regard thereto, and only irregular proceedings having so far taken place, which would have resulted in most enormous assessments if accepted.

Very respectfully submitted,

C. CROZET,  
*Engineer Blue Ridge Railroad.*

## GREENESVILLE AND ROANOKE RAILROAD COMPANY.

OFFICE GREENESVILLE AND ROANOKE R. CO.  
*Petersburg, November 24, 1851.*

JAMES BROWN, JR., ESQ.  
*Second Auditor.*

SIR,

I enclose you the last annual report of the stockholders of the Greenville and Roanoke railroad company, and have added to it a statement of the receipts and disbursements from the date of it to September 30th, 1851, to shew you how the company stood on that day. From these statements you will see that it is out of debt and in a prosperous condition.

I remain, respectfully, your ob't serv't,

H. D. BIRD, *Pres't.*

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*Seventeenth Annual Meeting of the Greenville and Roanoke Railroad Company.*

PROCEEDINGS OF THE STOCKHOLDERS.

At the regular annual meeting of the Greenville and Roanoke railroad company, held on Friday, the 16th day of May 1851, there was represented, in person and by proxy, a majority of the stock, upon which the meeting was organized, and D'Arcy Paul was appointed chairman, and H. D. Bird secretary.

The president presented and read to the meeting the report of the board of directors, shewing the condition of the company for the last twelve months, which, on motion, was received and ordered to be filed.

The meeting then proceeded to the election of officers, when H. D. Bird was unanimously re-elected president, and A. G. McIlwaine, John Bragg, B. H. May, Robert Leslie and Edmund Wilkins, directors.

On motion, P. C. Spencer, Thomas N. Lee and Quin Morton were appointed a committee to examine into the condition of the road, depots, &c.

The following resolution was passed unanimously :

*Resolved*, That in the opinion of this meeting, in order to protect their interest in our road, it is of the utmost importance that the stockholders of the Greenville and Roanoke railroad company shall subscribe to the stock of the Raleigh and Gaston railroad company.

The meeting then adjourned.

D'ARCY PAUL, *Chairman.*

H. D. BIRD, *Sec'y.*

## REPORT OF THE BOARD OF DIRECTORS.

We present you with the customary statements of the business of the road and the affairs of the company for the twelve months ending April 30th, 1851. From these you will see that the receipts of transportation were \$ 37,461 32, and the expenses \$ 22,829 74. The nett income was \$14,631 58. This added to the surplus from the previous year, and the interest received, made the sum of \$16,421 52, applicable to dividends. Out of this we made a dividend of seven and a half per cent., which left a surplus of \$1421 52.

Comparing the receipts with those of the preceding year, it appears there was a falling off in freights of \$ 4211 08, but a gain in passengers of \$1908 81, making a nett falling off in the receipts of \$2302 27. The decline in the freights was chiefly in the item of tobacco, of which it is well known the crop was a short one.

You are well aware, that an effort is now making to raise the stock of the company incorporated to rebuild the Raleigh and Gaston railroad. The last account we have from North Carolina is that the subscription there is progressing well, and no doubt seems to be entertained that a considerable portion of the stock will be raised in that state. The Petersburg commissioners are still soliciting subscriptions here, but owing to the numerous heavy drafts for other works, which have so lately been made on the people of this community, the paper fills up slowly.

The great importance of keeping up the Raleigh and Gaston railroad to ours is too obvious to dwell upon. More than half the business of our road comes over that work, and that we would lose a large amount of it, if wagons were substituted for the railroad, is very certain. But besides this loss, if the Raleigh road should go down, we shall be deprived of the great benefits of a connection with the North Carolina railroad, which is now about to be put under contract. These facts call imperatively upon those owning stock in our road to assist in the reconstruction of the Raleigh road. Some have already done so, liberally, but others have as yet done nothing. We think this results mainly from the subject not having been brought directly to their notice—and some perhaps may imagine that the Raleigh road will not be suffered to go down. These last are informed that during the last busy season the Petersburg company had to decline receiving goods for the Raleigh road, owing to its inability to take them from Gaston. The road indeed, we are assured, cannot continue transportation much longer in its present dilapidated condition. We trust, therefore, that those stockholders who have not yet taken an interest in the new company will come forward and do it. Besides securing our road in its present prosperous condition, and indeed advancing it, the investment itself cannot fail to be profitable; for the Raleigh road, reconstructed with edge-rails, and connected with the important work about to be built through the state of North Carolina, must do a good business. It therefore has a double claim on your attention.

By order of the board.

H. D. BIRD, *President.*

*Detailed Statement of the Receipts and Expenses of Transportation of the  
Greensville and Roanoke Railroad Company for the twelve months end-  
ing April 30th, 1851.*

<b>Receipts :</b>					
From freight,	-	-	-	-	25,685 46
passengers,	-	-	-	-	9,775 86
mail,	-	-	-	-	2,000 00
					<u>\$ 37,461 32</u>
<b>Expenses :</b>					
Paid Petersburg railroad company for doing the transportation,	-	-	-		14,984 53
<b>Cost of repairs of road :</b>					
For timber,	-	-	-	3,048 63	
hand hire,	-	-	-	1,519 50	
overseer,	-	-	-	400 00	
iron, spikes, &c.	-	-	-	837 69	
					<u>5,805 82</u>
<b>Cost of repairs of bridges, depots, &amp;c. :</b>					
Timber,	-	-	-	206 85	
Carpenters,	-	-	-	439 00	
House of Ryland's,	-	-	-	360 44	
Ropes, fixtures, &c.	-	-	-	81 86	
					<u>1,088 15</u>
Salaries of officers,	-	-	-		800 00
Insurance, taxes, &c.	-	-	-		151 24
					<u>\$ 22,829 74</u>
Nett income,	-	-	-	-	<u>\$ 14,631 58</u>

*Statement of the Receipts and Payments on Dividend Account for the  
twelve months ending April 30th, 1851.*

<b>Receipts :</b>			
Surplus undivided May 1st, 1850,	-		1,505 91
Nett income as above,	-	-	14,631 58
Interest received,	-	-	284 03
			<u>\$ 16,421 52</u>
<b>Payments :</b>			
Dividends of November 1850, and April 30th 1851, seven and a half per cent.	-	-	15,000 00
Surplus undivided,	-	-	<u>\$ 1,421 52</u>

N. B. The capital of the company remains the same, \$ 200,000. The debt has all been paid off, and the cost of road reduced to the amount of the capital.

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REPORT OF THE COMMITTEE OF EXAMINATION.

The committee appointed to examine into the condition of the property of the company beg leave to report :

That they have visited the road several times during the past year, and found it in good order. The timber and iron were in good condition, and the ditches well cleaned and properly graded.

As the Petersburg railroad company is now rebuilding their road with T rails, and there is a great prospect that the Raleigh and Gaston road will be rebuilt in the same manner, we suggest to you the propriety of making arrangements to have ours done also. We think this is all that is necessary to ensure a continuance of the present prosperous condition of the road.

P. C. SPENCER, *Chairman.*

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*Receipts and Disbursements of the Greenville and Roanoke Railroad Company from May 1st, 1851, to September 30th, 1851—5 months.*

Receipts :

Surplus undivided May 1, 1851,	-	-	-	1,421	52
Transportation for 5 months,	-	-	-	15,974	42
				<u>\$ 17,395 94</u>	

Disbursements :

Paid Petersburg railroad company for doing the transportation,	-	-	-	-	-	6,291	41
Officers' salaries,	-	-	-	.	-	500	00
Repairs of road,	-	-	-	-	-	1,039	34
Cash on hand Sept. 30th, 1851,	-	-	-	-	-	9,565	19
				<u>\$ 17,395 94</u>			

*Proceedings of the First Annual Meeting of the Stockholders of the Manassa's Gap Railroad Company, held at Salem in the County of Fauquier, 2d September 1851, together with the Amended Charter and the Proceedings connected therewith.*

AN ACT to amend the Charter, and authorizing a Subscription on behalf of the State to the stock of the Manassa's Gap Railroad Company. Passed Feb. 10th, 1851.

*Be it enacted by the general assembly,* When the Board of public works shall be satisfied that sixty thousand dollars of the stock of the Manassa's gap railroad company have been subscribed for by persons solvent and able to pay, the said board shall subscribe on behalf of the state for forty thousand dollars of the said stock; and so from time to time, and in the same proportion, shall continue to subscribe on behalf of the state for the said stock to the amount of three hundred and twenty thousand dollars, that sum being two-fifths of eight hundred thousand dollars, the capital stock of the said company.

The said subscription shall be paid *pari passu* with the individual subscriptions, and to that end the said board shall borrow on the credit of the state such sums of money as may be necessary.

The funds authorized by this act shall not be expended in the construction of said road beyond the town of Strasburg in the county of Shenandoah, until the same shall be completed from its eastern terminus to a point at or near that town.

That the second section, except that part conferring corporate existence, all of the third and eighth sections of the act to incorporate the Manassa's gap railroad company, passed March 9th, 1850, be and the same are hereby repealed.

That the said railroad company shall be subject to all the privileges of the Code of Virginia applicable to such company, in like manner as though its original charter had been granted since the commencement of said Code on the first of July eighteen hundred and fifty.

This act shall commence and take effect from and after its acceptance by a majority of the stockholders, given in general or a called meeting of the company assembled for the purpose, by a notice of the time and place of such meeting published for thirty days in one or more newspapers in the city of Alexandria, and a like publication in the town of Winchester, and the acceptance certified within six months from the passage of this act to the Board of public works.

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A meeting of the stockholders of the Manassa's gap railroad company was held at their office, in the town of Alexandria, on the 10th day of April 1851, in accordance with previous notice, as required by act of assembly.

On motion of F. L. Smith of Alexandria, the meeting was organized by the appointment of Giles Cook of Warren county as chairman, Edward Green being appointed to act as secretary.

The chairman having briefly stated the object of the meeting, on motion of T. M. Monroe, it was ordered that a committee be appointed



to examine proxies and report to the meeting their sufficiency. The chairman appointed T. M. Monroe, Robert Beverley and William D. Massey.

The committee on proxies made a report, which was received and concurred in.

The roll being called, a majority of all the votes which could be legally given were found to be represented, either personally or by proxy.

A report was handed in from the president of the company, which was received, read and ordered to be laid on the table.

The secretary was directed to read the act passed by the general assembly of Virginia, which was accordingly done.

A motion was made by F. L. Smith, that the vote be now taken whether this meeting will accept *the law* as passed by the general assembly, appropriating \$ 320,000 or two-fifths of the capital stock; which motion being put by the chair, was unanimously carried in the affirmative.

On motion, the meeting adjourned to meet again at 3½ o'clock.

The meeting convened at 3½ o'clock, as per adjournment, when, after an informal discussion of several matters,

On motion, an adjournment was made *sine die*.

GILES COOK, *Chairman*.

EDW. GREEN, *Secretary*.

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The first annual meeting of the stockholders of the Manassa's gap railroad company was held at the town of Salem in the county of Fauquier, on Tuesday, the second day of September 1851.

On motion of F. L. Marshall, the meeting was organized by the appointment of Philip Pitman as chairman.

Edward Green, the clerk of the company, was designated to act as secretary, and Reuben Johnston as assistant secretary.

On motion of F. L. Jones, a committee was ordered to examine and report on the validity of proxies. The chair appointed F. L. Jones, Rob't Beverley and Andrew J. Fleming.

*Resolved*, That the meeting adjourn for half an hour.

The meeting convened in accordance with the adjournment, when the chair stated, that having received the appointment of state proxy, he deemed it inconsistent with that appointment to act as their chairman, and begged to be excused; whereupon James K. Marshall was unanimously elected to act as the chairman of the meeting.

The committee on proxies made a report, and handed in a list of proxies, when there were found to be present, in person and by proxy, a large majority of all the votes that could be legally given.

The annual report of the president and directors for the past year, with the report of the chief engineer, was received, read, and unanimously approved.



The report of the examining committee for the past year was received, read and adopted.

Thomas H. Boswell asked for the reading of the proceedings of the first meeting of the stockholders, and also of the by-laws, which was accordingly done, and on his motion, a committee was appointed of one member from each county, to take into consideration the 16th by-law, which is, "The number of directors shall hereafter be seven." The chair appointed the following gentlemen, viz: Thomas H. Boswell of Fauquier, Samuel C. Richardson of Warren, George S. Ayre of Loudoun, John H. Carter of Prince William, Reuben Johnston of Alexandria, and Philip Pitman of Shenandoah.

*Resolved*, That this meeting adjourn to meet again at 2 o'clock P. M.

The meeting assembled at 2 o'clock, pursuant to adjournment, when the committee appointed to take into consideration the 16th by-law made a report; whereupon, the 16th by-law was unanimously rescinded.

On motion of Philip Pitman, it was moved that the salary of the president be increased by the sum of five hundred dollars; which motion being put by the chair, was carried in the affirmative unanimously.

On motion of Philip Pitman, Edward C. Marshall was nominated for the presidency and unanimously re-elected.

It was moved by Reuben Johnston, to go into an election of directors, when William H. Fowle of Alexandria, and James W. Foster of Fauquier, were unanimously re-elected, and Andrew Pitman of Warren, elected directors.

It was moved by Philip Pitman of Shenandoah, that the vote for the election of a director from Warren county be reconsidered; which motion, after discussion, was withdrawn.

On motion of Thomas M. Monroe,

*Resolved unanimously*, That in the election of Andrew Pitman of Warren, in the place of Alfred Rector of Fauquier, by this meeting, no disapprobation of the course of Mr. Rector is intended to be expressed, but the selection of Mr. Pitman is made in deference to the opinion, that the interests of the company require that one director should be selected from the Valley.

*Resolved further*, That the company express their entire approval of the course of Mr. Rector as director.

A motion being made for the election of an examining committee, the last committee, consisting of Thomas H. Boswell of Fauquier, and Reuben Johnston and Stephen Shinn of Alexandria, were unanimously re-elected.

On motion of A. J. Fleming, it was

*Ordered*, That one thousand copies of the reports of the president and directors, the chief engineer, and the examining committee, together with the amended charter and the proceedings of the last called meeting, be published in pamphlet form for the use of the stockholders; and that the same be distributed by the board of directors.

On motion, the thanks of the meeting were tendered to the chairman for the able, efficient and dignified manner in which he presided over their deliberations and discharged the duties imposed on him.

JAMES K. MARSHALL, *Chairman.*

EDW. GREEN, *Secretary.*

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## REPORT OF THE PRESIDENT AND DIRECTORS.

To the Stockholders of the Manassa's Gap Railroad Co.

GENTLEMEN,

This, the first annual report of the president and directors, is respectfully submitted.

The appended report of the treasurer, giving a statement of the accounts of the company up to the 4th of August, exhibits a balance in the treasury of \$41,637; amount of receipts \$103,800; payments \$72,262; whole amount of subscriptions \$513,650; subscriptions yet unpaid \$409,850.

A resolution of the stockholders passed at the first meeting, requires a separation of the funds raised by subscription east of the gap from those raised on the west. This policy of the company has led the board to divide into two parts the capital stock, which is \$800,000—of which \$500,000 is appropriated to the construction of the road from the Junction to the “top of the Ridge,” a distance of 42½ miles, and \$300,000 to the construction of the road from the top of the Ridge to Strasburg, a distance of 18¾ miles. The distributive eastern portion has been subscribed, and the estimate of the engineer, whose report accompanies this, will shew that \$500,000 will pay the expenses of construction of the road east of the gap, exclusive of equipment. The estimates place the charge for graduation, masonry and superstructure, at the sum of \$473,000, which is little less than \$11,000 a mile—while the balance, \$27,000, will be adequate to the payment of expenses of surveys, salaries, land damages, &c.

The cost of the road from the top of the Ridge to Strasburg will be greater in proportion to distance, growing out of the necessity of keeping the line more upon the rugged mountain side in order to get the best grade, and also out of bridging the two forks of the Shenandoah river. Very active efforts have been used to obtain the subscriptions necessary to raise the amount of capital stock (\$300,000) appropriated to this section of the work. Warren has nobly done her duty, by making a subscription of \$45,000. Notwithstanding our past failures in Shenandoah, we are sanguine of future success, confident that when all misapprehensions of the local policy of this company are removed, the enthusiasm with which the claims of this great work have been already received by a large majority of her people

will continue to spread and will prevail in the whole county of Shenandoah. The subscriptions of these two counties, \$120,000, will make, with the remaining state appropriation, \$240,000. Individual subscriptions, which now amount to nearly \$15,000, will, with the stock subscriptions of contractors, make up the amount of the capital stock (\$300,000) which is the distributive share of this section.

The board has ordered the corps of engineers of location to resume its work, now complete to Strasburg, and at once to carry on the location of the line to Harrisonburg. The enterprise is as much indebted to its friends in Rockingham and Shenandoah as to its friends in the east; and though the policy has been adopted as the wisest to take one step at a time, and that step now in progress is the one to Strasburg, yet its eastern friends will ever ardently strive, in perfect faith with their western brotherhood, to carry out the undertaking to its final consummation.

The road from the Junction to Strasburg will be 60 7-10 miles in length. It will be made at a small comparative cost, as also with moderate gradients and easy curves. Curvature of least radius 1000 feet—the average radii 2370. The heavy tonnage will pass from the west to the east. The greatest ascent in this direction is from the river to the mountain, the average grade being 51 feet, and the highest grade 70 feet, for less than a mile. There will be to the freight borne eastward an ascent for 20 miles—descent 40 miles.

The board have, upon the recommendation of our engineer, bought rails of the T pattern, a heavy rail weighing 52 pounds to the linear yard. The board have entered into a contract with Mr. Dunlop, an agent of high standing, for delivery in Alexandria of 2750 tons of best English iron, at \$40 50, and have additionally ordered 500 tons. Five hundred tons have arrived and 1032 tons have been reported to have been despatched and to be on the way. The iron thus ordered is sufficient in amount to lay the whole extent of the road from the Junction to Farrowville, within four miles of the top of the Ridge.

The board feel a great anxiety to complete the first twenty miles of the road, which will bring it to the Plains, a point of accommodation to all Upper Fauquier and a large portion of Loudoun—and should the weather be favorable, they flatter themselves that this most desirable purpose can be effected by the 1st of January 1852.

The board have at heart the making of a contract with the Orange and Alexandria railroad company, by which this company will be enabled to run its freight and passenger cars upon the road of that company from the Junction to Alexandria, without delay or cost of transshipment or transfer of any kind. An agreement had been effected between the two companies, but it was found that this company had not the legal power to make a binding contract of the sort. The stockholders of the Orange and Alexandria railroad company passed a resolution at their late meeting affirming their approbation of the measure, and the president and directors of that company have renewed their cordial expressions of willingness to unite with us in carrying out the provisions of the contract as soon as the power is conferred by the legislature.

Gentlemen, with congratulations upon the promising aspect of our great and cherished enterprise, we submit to your examination our account of the progress and prospects of the work.

By order of the board.

EDW. C. MARSHALL, *President.*

### REPORT OF THE CHIEF ENGINEER.

ENG'R'S OFFICE MANASSA'S GAP RAILROAD,  
*Alexandria, August 26, 1851.*

To the President and Directors.

GENTLEMEN,

I submit for your consideration the following statement of the operations of this department, since its organization, now about twelve months.

The line has been located from its intersection with the Orange and Alexandria road, (through the counties of Prince William, Fauquier and Warren,) to the town of Strasburg in Shenandoah, and the work is under construction to the top of the Blue Ridge mountain.

A careful estimate of the cost has been made, based upon its progress thus far, and the amount will not exceed my first expectations. The sum required for the graduation and masonry of that portion now under contract will be \$213,179.

Amount done,	-	-	-	-	94,607 94
Amount to do,	-	-	-	-	118,581 06
					<hr/>
Length in miles 42 4-10,	-	-	-	-	<u>\$ 213,179 00</u>

The location in Prince William leaves the Orange road at station 1468, and crossing the Alexandria and Fauquier turnpike at the Stage Stables, enters the Thoroughfare gap through the valley of the North fork.

In Fauquier the line pursues the slopes of Broad run, (passing the Plains) to the Salem heights—thence through the valleys of Chattam's run and Goose creek, leaving Rectortown to the right about half a mile, reaches the top of the Blue Ridge mountain at Manassa's gap.

The country traversed thus far, noted for its fertility, productiveness and beauty, whose inhabitants are characterized by great energy and industry, presents to the mind ample supplies for the support and maintenance of this line of improvement, furnished at so small a cost.

The grading up to Salem will be completed and in readiness for the rails by the middle of October; and from the progress already made, the road may be opened for daily use as far as Farrowville in July following.

The western slope of the Blue Ridge mountain presents the greatest difficulties on the entire route to Strasburg: much time therefore has been given to it, and an additional cost of location, but the results obtained have fully justified the expenditure incurred.

The route through Warren passes along the mountain slopes bordering on Mannassa's run as far as Mrs. Sillman's near the village of Smoketown; thence through Happy creek valley, it crosses the Shenandoah river near the junction of its North and South forks, leaving Front Royal, the county seat of Warren, to the south, about a mile distant.

The average ascent eastward of this portion of the route is fifty-one feet per mile, with a maximum of 70 for 48 chains—the curvature is easy—the minimum radius (and this only for a short distance) exceeds 1,000 feet, while the average is equivalent to a radius of 2,370 feet. The character of the work on this portion of the route is such, that if the heavier portions are pressed forward in advance, the use of the whole may be obtained at an earlier day.

From the forks of the river the line is located on the south side of the North fork, and passing near Water Lick church, crosses the North fork at Pittman's ford, reaching the town of Strasburg in a distance of 60 7-10 miles from its eastern terminus.

*Cost of Construction to Strasburg.*

From the junction to the top of the Blue Ridge mountain:			
Graduation,	-	-	213,179
Superstruction,	-	-	260,000
			<hr/>
			473,179
From the top of the mountain to Strasburg:			
Graduation,	-	-	283,000
Superstructure,	-	-	111,560
			<hr/>
			394,560
			<hr/>
Distance 60 7-10 miles,	-	-	<u><u>\$867,739</u></u>

In general directness the Manassa's gap road will stand the test of comparison, the increase over a direct line being less than 16 per cent. This, with its favorable gradients, curvature, small cost of construction and resources and fertility of the district accommodated, must place it amongst the most profitable lines of railroad in the country.

Contracts are made with Messrs. Smith & Perkins of Alexandria for the equipment of the road; and from the well earned reputation of the firm, we have every assurance that the machinery will be ready in time, and made in accordance with the stipulations given.

The surveys are in progress westward through the Valley of Virginia to Harrisonburg, and in due time will be submitted for your consideration.

In conclusion, it gives me pleasure to acknowledge the valuable aid I have received from my assistants and their associates, in carrying on the important work you have entrusted to my charge.

Respectfully submitted,

JNO. McD. GOLDSBOROUGH,  
*Chief Engineer.*

*Return of the state of the Manassas's Gap Railroad Company from its organization on the 1st day of August 1850, to the 4th of August 1851.*

<b>Capital stock, \$ 800,000 :</b>				
Subscribed by corporation of Alexandria	3000 shares, at \$ 50 each,	-	150,000	00
" individuals,	3164 " " "	-	158,200	00
" state of Virginia,	4109 " " "	-	205,450	00
				<u>\$ 513,640 00</u>
Am't subscr'd by corp'tion of Alexandria, unp'd,	\$128,600	00		
" " individuals,	"	114,781	00	
" " state of Virginia,	"	166,469	00	
				<u>409,850 00</u>
<b>Expended :</b>				
<b>For engineering, including pay of engineers, surveying instruments, camp equipage and money in the hands of the chief engineer,</b>				
				11,772 11
<b>For mileage, &amp;c. of president and directors,</b>				
				591 71
<b>For salaries of president, clerk and treasurer and chief engineer,</b>				
				3,050 00
<b>For office expenses, including office furniture, stationery, books, rent, fuel, &amp;c.</b>				
				437 19
<b>For graduation and masonry,</b>				
				48,936 62
<b>For cross ties,</b>				
				1,991 13
<b>For interest,</b>				
				62 50
<b>For land damages,</b>				
				4,108 61
<b>For miscellaneous expenses, including preliminary survey, expenses of commissioners, advertising, printing, postage, lawyers' fees, &amp;c.</b>				
				1,312 52
				<u>482,112 39</u>
Cash balance on hand 4th August, 1851,	-	-	31,537	61
				<u>\$ 513,650 00</u>

EDWARD GREEN,  
Clerk and Treasurer.

***Statement of the Receipts and Disbursements of the Manassa's Gap Railroad Company from the organization thereof on the first day of August 1850, to the 4th day of August 1851.***

**Receipts:**

Of the corporation of Alexandria, -	-	-	21,400 00	
Of individual subscribers, -	-	-	43,419 00	
Of the commonwealth of Virginia, -	-	-	38,981 00	
			<u>103,800 00</u>	

**Disbursements:**

Paid for engineering expenses, -	-	-	11,772 11	
Paid for president and directors—expenses, mileage, &c. -	-	-	591 71	
Paid salaries of president, clerk and treasurer, and chief engineer, -	-	-	3,050 00	
Paid office expenses, including office furniture, stationery, books, rent, fuel, &c. -	-	-	437 19	
Paid for graduation and masonry, -	-	-	48,936 62	
Paid for cross ties, -	-	-	1,991 13	
Paid for interest, -	-	-	62 50	
Paid for land damages, -	-	-	4,108 61	
Paid for miscellaneous expenses, including preliminary survey, expenses of commissioners, advertising, printing, postage, commission to collectors, lawyers' fees, &c. -	-	-	1,312 52	
			<u>72,262 39</u>	
Balance cash on hand in Farmers Bank, -	-	17,695 93		
" " Exchange Bank, -	-	13,841 68		
		<u>31,537 61</u>		
			<u>\$103,800 00</u>	

**EDWARD GREEN,**  
*Clerk and Treasurer.*



*List of the President and Directors, and of the Officers and others employed by the Manassa's Gap Railroad Company, together with their Salaries.*

NAMES.	Duties.	How Engaged.	Annual Compensation.
Edward C. Marshall, -	President,	15 cts. per mile for	1000 00
James W. Foster, } -	Directors on the part	traveling to and	
Alfred Rector, } -		from, and other	
Wm. H. Fowle, } -	Directors on the part	necessary expen-	
Chas. H. Hunton, } -		ses while in at-	
Wm. H. Irwin, } -	of the state.	tendance on the	
		board.	
J. McD. Goldsborough, -	Chief engineer,	-	2500 00
Edward Green, -	Clerk and treasurer,	-	600 00
Hugh Rice, -	Prin. ass't engineer,	On location,	1500 00
B. W. Prestman, -	Leveler,	"	912 50
C. Bronaugh, -	Surveyor,	"	547 50
F. F. Cooke, -	Calculator,	"	365 00
R. Sherrard, -	Rodman,	"	365 00
Thomas Marshall, -	"	"	365 00
J. H. Rector, -	Chainman,	"	365 00
A. H. Johnson, -	"	"	365 00
Thomas Tippet, -	Axeman,	"	365 00
Hans Flowerree, -	"	"	365 00
Wm. Cole Bailey, -	Prin. ass't engineer,	On construction,	1500 00
C. R. Hodges, -	Resident engineer,	"	1095 00
M. P. Barnitz, -	"	"	912 50
N. Goldsborough, -	"	"	912 50
W. L. Powell, -	Assistant engineer,	"	456 25
H. D. B. Norris, -	"	"	456 25
J. N. Claiborne, -	"	"	456 25
A. Marbury, -	"	"	456 25
W. F. Matthews, -	Rodman,	"	365 00
J. C. C. Peber, -	Rodman,	"	365 00
G. H. Bayly, -	Rodman,	"	365 00
Thomas Dwyer, -	Draughtsman,	"	547 50
M. M. Welsh, -	Superintendent,	"	912 50

## RICHMOND AND DANVILLE RAILROAD COMPANY.

OFFICE RICHMOND AND DANVILLE RAILROAD CO.

Nov. 12th, 1851.

*To the Stockholders Richmond and Danville Railroad Co.*

GENTLEMEN,

The reports of the chief engineer and treasurer, which are herewith laid before you, exhibit in detail, in their respective departments, the general progress and condition of the work upon which we are engaged, with so much succinctness that they leave nothing of special importance to be presented to your consideration. Since your last meeting a considerable portion of your road has been put in running order, and with success flattering to the expectations of its most sanguine friends. The point to which the road has been used since the 19th of May, viz: the Appomattox river, is distant twenty-seven miles from Richmond, and there has been a regular and constant increase of business up to this time. The recent extension to Amelia courthouse and to Jetersville has given very enlarged facilities to that portion of the country, and has awakened among the population a new and increased interest in its behalf.

The determination by the chief engineer to construct stone abutments at the Appomattox river in lieu of iron pillars, requiring a very large amount of stone work to be done, and the materiel having to be transported some distance down the river, and being of a difficult and obstinate nature to work, necessarily caused a longer delay than was anticipated, and consequently postponed the earlier use of the road to Amelia courthouse. The two most recent freshets in the Appomattox reaching a water mark much higher than had before been known, required that a greater amount of water way should be afforded than entered into the original plan of the bridge, and the time which has been expended on that structure is well repaid in its permanency and substantiability. The heavy losses to the stock and capital of a company, not to speak of that of human life, which is irreparable and incalculable, that have been experienced upon other lines in the country by the hasty and imperfect construction of bridges, justify the policy which dictates any time or expense that ensures safety. It may be mentioned in this connection that the rumor, which like a thousand others in relation to this road, had obtained currency, that this bridge was too short, was as false as it was ridiculous. The bridge is not one inch shorter or longer than originally designed, and yet rumors of the character indicated have, in connection with others equally false and ridiculous, been brought to operate upon the public mind with most injurious tendency. With the opening of your road to Jetersville its greatest physical difficulties may be said to be overcome, and such extension given to it as will carry to the country penetrated by it a practical demonstration of its benefits, and thus, doubtless, remove prejudices more obdurate, and opposition more stern than any difficulties which nature presents. The rapid roll of the engine and cars to-

wards the interior seems at last, in some degree, to have awakened that portion of the "unterrified commonwealth," and "the mother of states and statesmen" from their drowsy slumbers and listless torpor.

It will be seen from the exhibit made by the report of your treasurer that there remains of individual subscriptions unpaid the sum of \$53,000; and of subscription by the commonwealth unpaid \$59,000; making together the sum of \$112,000, and of which that portion due by the commonwealth can only be realized upon payments made by individuals. Every exertion has been made to collect subscriptions, short of the harsh one of legal process, which, however, has been pursued in some instances, and yet leaving the unpaid residuum above mentioned. Such delinquency is a matter much to be deplored, and we can only repeat the observations in relation to it made in the last annual report. The very wide and scattered character of the subscriptions, dispersed over a large area of country, is a great impediment to the payment of requisitions regularly, and the collecting agent is at great labor and inconvenience.

The legislature at its last session increased the capital of the company \$500,000, and there remains of the original capital unsubscribed about \$55,000 to be supplied by individual subscription, which, when made up, would entitle the company to a state subscription of about \$80,000. Of the new capital \$20,000 are to be raised by private means.

It will be observed that the road is now in actual use to Jetersville, a distance of 44 miles; and that, with some slight work to be accomplished by December, the grading will have been finished to Burkeville, and that a large portion beyond that point is in such a state of forwardness as to justify the conclusion that the grading will be completed to Keysville by the 1st May ensuing. Under this aspect of affairs, to keep the work in progress and give the country the benefit of its early completion, new subscriptions became necessary. It was believed the counties along the line could easily and would as readily make up the amount. Under an act of the general assembly, the courts of the counties respectively of Halifax, Charlotte, Pittsylvania, Henry and Amelia made an order authorizing polls to be held on the question of a subscription by each of them in the sum of \$50,000 for the three first named, and of a less sum for the other two. The intermediate counties lying immediately on the line of the road, and having hitherto subscribed very partially to the improvement, it was fondly expected could have no difficulty in such a proposition. We regret to inform the stockholders that in this expectation we have been disappointed. The county of Halifax, penetrated as it is diagonally by the road running through its entire extent from northeast to southwest, and with three navigable streams reaching it at most convenient points, a county of immeasurable wealth, being indeed one of the largest and most wealthy in the commonwealth, was the first to refuse its aid. The county of Charlotte, not less interested, nor less advantageously intersected by the line of road, followed the example of her large, populous, and wealthy neighbor.

This is no place for comment on these proceedings. They belong,

## RICHMOND AND

## OFFICE

*To the Stockholders*

GENTLEMEN,

which are herewith  
tive departments.  
which we are en-  
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Since your last  
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county with the bitterest  
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ie favor. No effort was  
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The great extent of the  
a subject itself so novel  
conferring with them over  
to its decision, were the

ounty of Charlotte. An aged  
took the stump in a regular  
subscription; and the same  
in the time allotted, and the  
the people, have given a deci-  
sion is without a parallel any-  
ed is in keeping with the opposi-  
ar enterprise in every form since  
detailed history of the peculiar ob-  
obstructed your path since the first  
wish a source of curious amusement  
leisure shall be given to the public  
ate the stockholders, however, upon  
ch has been given to the subject in  
aken a renewed and more vigorous  
part of the people, and we may safe-  
w—and never until now—has it been  
It has taken hold of their judgments  
arts, and there is no shadow of doubt  
the kindly influences of a little more  
ed for the present in the effort made  
feel safe in assuring the stockholders that  
success. Intelligence has been received  
above named, of liberal subscriptions by  
ay instances by those who voted against

Amelia and Henry, hitherto most liberal in  
scriptions, have clearly manifested a deter-  
their corporate capacity whenever the inter-  
lead such aid as would make that of the  
We should not, however, be dispirited.

remember that the greatest enterprises of this kind of the stood still for want of means. The New York and Erie the longest and grandest of all, was chartered in 1832, and had, with a capital of more than \$4,000,000, only reached 46 and came to a dead halt more than once for want of means. too, with the Boston and Albany and Georgia railroads, the two greatest (if, indeed, they can be said to be at all inferior) enterprises of the kind in this country. It is a matter of the deepest importance that measures should be taken to continue the progress of the work for however short a distance, and if possible, to that end contractors should be informed before the end of the year, in order that arrangements might be made by them with that view.

When we look to what has been and is doing on this subject in other parts of the state and country, less wealthy, less able and favored, it is both curious and mortifying to witness the apathy, indifference and opposition that distinguish our portion of the country. The individual citizens on the North Carolina Central railroad subscribed one million to that improvement in the space of six months; and it is now under contract, and almost wholly to farmers along the line, and yet no man, with any pretensions to geographical or statistical information, will pretend to contrast one-half its distance with the country penetrated by our own. The town of Petersburg has subscribed \$125,000 more to the Southside road than Richmond has to *this*, and has recently subscribed \$100,000 to renew the Raleigh and Gaston road. Lynchburg has subscribed *half a million* to the Virginia and Tennessee road, and yet either Halifax or Pittsylvania makes each more tobacco than Bedford, Botetourt, Roanoke, Rockbridge and Montgomery, the five counties lying immediately *west* of Lynchburg. The four counties of Halifax, Pittsylvania, Caswell and Henry, lying at the immediate western terminus of this road, an average distance of 140 miles from Richmond, make *one-fourth* of the whole tobacco crop of the state, and with the counties of Chesterfield, Amelia, Nottoway, Lunenburg, Prince Edward, Charlotte, Mecklenburg, Franklin and Patrick, with Person, Rockingham, Stokes and Surrey, North Carolina, make more than one-half.

There is likewise more wealth, means and ability on this 140 miles and its contiguous terminus, than can be found on any other line of 200 miles in this state, no matter in what direction that 200 miles shall be laid. This line moreover, extended, is the shortest and straightest through Columbia, S. C., and Augusta, Georgia, to the South, and passes through one of the most delightful and productive agricultural regions on the continent, and yet there are those among us whose daily habit it is to ridicule and sneer at this enterprise as too insignificant to engage attention. To those who are acquainted with the geography and productions of the country penetrated by our road, there is no need of argument to prove the value of the investment—to those who are not, we can only commend them to that acquaintance. If this were the first or the only instance in this country, of the greatest and most valued enterprises meeting with indifference, ridicule, gibes and jests, we might perhaps be disposed to manifest

... ..

... .. demonstrated that generally,  
... .. importance of an undertaking,  
... .. has conferred—just in that  
... .. officers met with opposition and

... .. about my testimony to the zeal  
... .. and agents connected with the  
... .. and I feel it my duty to com-  
... .. of the stockholders the capa-  
... .. of our clerk and treasurer, whose  
... .. assant and responsible character;  
... .. rious capacity of the clerk of the  
... .. inion these officers cannot be sur-  
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... ..ctors.

... .. respectfully,

WHIT'L P. TUNSTALL,  
*President.*

## [ A.]

*Return of the Condition of the Richmond and Danville Railroad Company for the year ending September 30th, 1851.*

<b>Capital stock, \$2,000,000 :</b>			
Subscribed by individuals 3,271 shares, at \$ 100 each,	327,100 00		
Subscribed by the city of Richmond 2,000 shares, at \$ 100 each,	200,000 00		
Subscribed by the town of Danville 100 shares, at \$ 100 each,	10,000 00		
Subscribed by the commonwealth of Virginia 7,764 shares, at \$ 100 each,	776,400 00		
		1,313,500 00	
Amount subscribed by individuals unpaid,	53,082 03		
Amount by commonwealth of Virginia,	59,003 00		
Amount by town of Danville,	5,550 00		
		117,635 03	
		1,195,864 97	
Received from rents and personal property,		1,357 92	
Received from transportation department,	17,936 85		
Deduct expenses for the same,	15,385 00		
		2,551 85	
<b>Debts due by the company :</b>			
Guaranteed bonds issued,	140,400 00		
Borrowed from the banks on company's notes,	12,500 00		
Advance from the Board of public works,	20,000 00		
Amount held for instruction from stockholders,	120 00		
Open accounts due to contractors and others,	38,944 55		
Reserved fund held under contracts,	17,028 18		
		228,992 73	
		<u>\$ 1,428,767 47</u>	
<b>Construction of the road :</b>			
Grading and masonry, main line and branches eastern and western division, including engineering, surveys, road crossings, turn tables, &c. &c.	681,435 09		
Bridges: James river, canal, Swift creek, Appomattox river, Flat creek and road and farm bridges, masonry and superstructure,	134,205 51		
Engine, car and station houses, wood sheds and water stations,	9,041 68		
Depot improvements at Richmond, filling in, trestling wall at the river margin, &c. &c.	19,010 81		
Land damages as far as settled,	13,835 31		
Real estate in Richmond and Danville,	8,372 56		
Iron, spikes, chairs, switches, timber, sills, keys, plates, &c. &c.	416,747 84		
		1,282,648 80	
Machinery and furniture of the road—such as locomotives, passenger cars, freight, coal, stone and truck cars, &c. &c., with stationary power,		87,210 32	
Surveying instruments and other personal property,		8,179 86	
Contingent expenses—salary of officers, law expenses, &c. &c.		26,499 43	
Interest account—amount received,	2,804 65		
Amount paid out,	3,436 05		
		631 40	
		1,405,169 81	
Debts due to the company on guaranteed bonds, &c.		14,067 93	
Funds in hand, on deposit, &c.		9,529 73	
		<u>\$ 1,428,767 47</u>	

## [ B. ]

*Receipts and Disbursements of the Richmond and Danville Railroad Company  
within the year ending September 30th, 1851.*

Balance of funds in hand, per last report,	-	-	-	870 26
Received from private stockholders,	-	-	91,997 37	
“ corporation of Richmond,	-	-	40,000 00	
“ corporation of Danville,	-	-	4,450 00	
“ state of Virginia,	-	-	204,909 00	
				<u>341,356 37</u>
“ 140,400 guaranteed bonds issued,	-	-		130,400 00
“ rents, personal property, &c.	-	-		351 00
“ stockholders to be held over,	-	-		100 00
“ transportation department,	-	-		17,934 85
Advance from the Board of public works,	-	-		20,000 00
Borrowed from the banks,	-	-		12,500 00
				<u>\$ 523,512 48</u>
Receipts from all sources,	-	-	-	<u>\$ 522,644 22</u>
Disbursements:				
Paid accounts due by the company,	-	43,587 11		
“ notes due by do.	-	21,173 67		
“ on account of reserved fund,	-	26,923 14		
			91,683 92	
Engineering expenses,	-	-	19,724 82	
Grading and masonry, &c. main line and branches, with materials and labor on branches and sidings,	-	-	175,084 55	
Work and materials on bridges,	-	-	35,104 97	
Iron, spikes, switches, timber, sills, keys, &c.	-	-	87,257 31	
Land damages,	-	-	3,319 99	
Contingent expenses, including expenses collecting, requisitions, &c. &c.	-	-	2,880 34	
Surveying instruments and other personal property,	-	-	1,409 98	
Transportation department—train expenses,	-	-	15,385 00	
Gravel trains for maintenance of way, &c.	-	-	3,072 54	
Salaries of president and clerk and treasurer,	-	-	3,400 00	
Per diem and mileage of directors,	-	-	851 70	
Real estate—depot lot in Danville,	-	-	1,000 00	
Materials and labor for track laying, road crossings, turn tables and mile posts,	-	-	30,851 14	
Station houses, wood sheds, &c.	-	-	6,834 59	
Improvements on depot lot at Richmond,	-	-	4,397 32	
Machinery and furniture of the road,	-	-	25,261 20	
Law expenses and interest,	-	-	2,395 45	
Total disbursements,	-	-		<u>509,914 82</u>
Debts due the company,	-	-	-	4,067 93
Funds in hand this day,	-	-	-	9,529 73
				<u>\$ 523,512 48</u>

E. E.

By order of the board of directors.

P. VAN DEURSEN,  
Clerk and Treas.



*List of the Officers and Directors of the Richmond and Danville Railroad Company, and their Compensation.*

OFFICERS.	NAMES.	Compensation.
President. - -	Whitmel P. Tunstall, - -	2000 00 per annum.
Vice president, - -	A. F. D. Gifford.	
Clerk and treasurer, - -	P. Van Deursen, - - -	1400 00 "
Chief engineer, - -	Andrew Talcott, - - -	3000 00 "
Superintendent, - -	John H. Osborne, - - -	1500 00 "
Secretary to the chief, - -	John Pennefather, - - -	750 00 "
Assistant engineer, - -	Benj. M. Jones, - - -	130 00 per month.
" " - -	Geo. N. Skipwith and E. M. Richards,	115 00 "
Assistant to the chief and draftsman, - -	Earnest Kurth, - - -	3 50 per day.
Subassistant, - -	Jno. L. McAlpine and Ro. F. Haskins,	2 50 "
" - -	Wm. A. Johnson, H. C. Derrick, }	1 75 average.
" - -	Sidney Coolidge and J. R. Randolph, }	
Freight clerk, - -	John S. Vaughan, - - -	600 00 per annum.
Depot agent, - -	Jno. McCamn, - - -	420 00 "
Overseer of road, - -	Wm. H. Shields. - - -	420 00 "
Agent of collections, - -	John E. Dennis, - - -	500 00 "
Directors on behalf of private stockholders, - -	{ A. F. D. Gifford, - - -	4 00 per day and mileage when engaged on business of the company.
	{ Samuel Reeve, - - -	
	{ Vincent Witcher. - - -	
Directors on behalf of the state, - -	{ Lewis E. Harvey, - - -	
	{ J. B. Stovall, - - -	

P. VAN DEURSEN,  
Clerk.

Richmond, Sept. 30th, 1851.

ENGIN'G DEP'T RICHMOND AND DANV. RAILR'D,  
*Richmond, Oct. 30th, 1851.*

WHIT'L P. TUNSTALL, ESQ.,  
*Pres't R. & D. R. Co.*

SIR,

The following statement is submitted to enable you to comply with the requisitions of the Board of public works :

Length of the Richmond and Danville railroad,	-	140.2 miles.
Length of branches,	- - - -	3.9 "
Total,	- - - -	<u>144.1</u> "
Length of road graded,	- - - -	62.5 "
Length of branches graded,	- - - -	3.9 "
Total graded,	- - - -	<u>66.4</u>
Track laid on main line,	- - - -	36.5 "
Track laid on branches and sidings,	- - - -	6.4 "
Total track laid,	- - - -	<u>42.9</u> "

Of which 29.8 miles are laid with an edge rail weighing 51 to 53 lbs. per yard, and the remainder with a plate rail weighing 24 lbs. to the yard. The repairs are made by workmen hired by the year, month or day. The location has not been perfected the whole distance ; consequently it is impossible to furnish at this time a complete map of the improvement.

I have the honor to be

Your obedient servant,

ANDREW TALCOTT,  
*Chief Engineer R. & D. Railroad Co.*

**RICHMOND, FREDERICKSBURG AND POTOMAC RAIL-ROAD COMPANY.**

*Eighteenth Annual Meeting of the Stockholders, held 26th May 1851.*

The meeting was organized at a quarter after twelve o'clock M., by calling James Lyons, Esq. to the chair, and the appointment of C. W. Macmurdo as secretary.

The chair appointed Messrs. G. A. Myres, H. Rhodes and Wirt Robinson a committee to examine such proxies as may have been given by stockholders to represent them.

The committee, after examining the proxies, made a report, which was approved by the meeting; and the proxies, appearing by the report of the committee to be properly authorized, were empowered to vote as such.

The secretary having called over the list of stockholders, it appeared that the whole number of votes which could be given was 4,542 votes, of which were present the Board of public works, by their proxy, James Lyons, Esq. entitled to 395 votes, and individual stockholders entitled to 3,349 votes, making in all 3,744 votes present.

The president and directors made the following

**ANNUAL REPORT.**

In the last annual report of the board of directors to the stockholders the board remark, "In the belief that the income of the company for the current year will be equal to that of the past, it is the design of the board to continue to improve the superstructure of their road, by laying down a heavier rail than the present on a considerable portion of the route. They will take care, however, in improving their road and machinery, not to hazard any interruption of the customary dividends to the stockholders, and to incur no expenditure, which, in a financial aspect, may not be justified."

It will be seen from the accompanying tabular statements, that the gross receipts of the company for the past year were \$271,525 71, being an increase on those of the previous year of \$ 33,561 97. The board of directors were, in consequence, enabled, out of the income of the year, after setting apart the requisite funds for the customary dividend, and all payments of interest, to improve materially the superstructure of the road, and to add to their stock of motive power and materials. One thousand and fifteen tons of new and heavier iron have been laid down, two new coaches and fourteen cars have been added to the stock of motive power, and an addition of about \$12,000 has been made to that of materials for repairs of road and motive power. It will be perceived, notwithstanding these increased expenses of the past year, and the payments also out of the income of the year on account of loss by fire at the Richmond depot in December 1849, and \$10,991 56 in full of the judgment against this company in the case of Margaret L. Heth and others, that the board

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lar statements, that the  
of the company, due in  
to the stockholders, was  
of the loan due in 1856  
during the past year, if  
company's bonds, due in

current year will not pro-  
only the amount of travel  
appears to be less, so far, than  
but there will be necessarily a  
revenue of the company, by  
Louisa, or Virginia Central rail-  
diamond, which was opened for  
January last. Whilst this diversion  
the legitimate business of this  
sufficient to keep up permanently  
the Junction and Richmond for its  
counsel retained by the board of direc-  
ence, that as soon as the case can be  
extension, at least for travel, will be  
ed that the Central railroad company  
company the whole amount received  
ssengers.  
income the board of directors cannot  
improvements to their road and ma-  
the past year, but their receipts will,  
adantly adequate, after the payment of  
able them to make the usual dividends  
steadily to improve their road and ma-

been made of the members of the board  
the reconstruction of the late Portsmouth  
(and Roanoke railroad,) on the prosperity  
motives which induced stockholders of this  
construction, the board of directors in reply  
proper to communicate the following infor-

aware that on the Portsmouth cars ceasing to  
1845, the Petersburg railroad company disconti-  
acts with the railroad companies north of Pe-  
bearing "any part of the expenses attending"  
assigned by the president of the company  
Portsmouth cars having ceased to run, we have no  
portion for the travel, and can, therefore, charge our  
The stockholders are also aware that at the same time,

and afterwards, an opposition was encouraged to the companies north of Petersburg, by the president of the Petersburg railroad company, by way of the James river and bay boats.\* The result of these measures, it was at the time predicted, would lead necessarily to the running of sea steamers on the coast, and to the revival of the Portsmouth railroad.† Such a result was, in the opinion of your board of directors, the unavoidable consequence of the attempt of the president of the Petersburg railroad company to get up and sustain an opposition to the companies north of Petersburg, by way of the James river and bay route. This attempt made it no longer an object with the companies north of Petersburg to oppose any legislative measures for the revival of the Portsmouth road, and it ceased to be one to unite in any arrangement to countervail the sea steamers. The deliberate opinion of the board of directors, expressed to the Board of public works in their report of November 1845, (see report of the Board of public works of that year, page 126,) was, that so long as this policy continued on the part of the Petersburg railroad company or its president, it became the interest of this company "that the southern travel should be taken north by sea, or any other route, rather than it should be brought to Petersburg, and there made the means of nourishing a competition for their whole travel."

The board of directors regret that the directors and stockholders of the Petersburg railroad company could not see this subject in the same aspect in which it presented itself to them, and that the results predicted by the board of directors of this company have, in consequence, necessarily occurred.

There being no united opposition to the revival of the Portsmouth railroad, such legislative provisions were granted to a new company, under the name of the Seaboard and Roanoke railroad company, as made it an object to parties from New England to avail themselves of them. In consequence, the scheme of rebuilding the road had so far progressed, that in the month of October last all the iron for laying down the whole road from Portsmouth to Gaston was procured, and the greater portion of it was on the ground, and the funds only were wanting to lay it down.

In the mean while the opposition by the James river and bay line to the companies north of Petersburg had been quieted, partly in consequence of the active co-operation of the Port Walthall association in sustaining the upper route, and in part by the purchase of an interest in the bay line of boats by stockholders of the railroad and steamboat line between Petersburg and Washington. This joint proprietorship in the two lines enabled the stockholders to secure the adoption of a policy on the part of the bay boats, to the mutual advantage of both the bay and upper route. Of the advantage of this relation to the Richmond and Fredericksburg railroad company, its stockholders have had the most satisfactory evidence in the largely increased income of the company during the last two years.

\* See Rep. B. P. W. Dec. 1846, p. 430, and report of December 1848, page 591.

† See Report of Board of public works, December 1846, pages 431 and 432.

Under these circumstances, when it became evident that the Portsmouth railroad was to be rebuilt, (for it could not be doubted that, with the rails on the ground for the entire distance, means would be found in some way to lay them down,) all the members of the bay company, as well those who were stockholders of the upper route, as those who were interested only in the bay boats, deemed it best, that the bay company should make such a subscription to the Seaboard and Roanoke railroad as would enable the bay company to exercise a controlling influence in its management, and thus prevent its becoming, as it necessarily would, in separate hands, a rival and antagonist line to the upper route. Accordingly, a subscription equal to this object was made to it by the Baltimore steam packet company in its corporate capacity. As the matter now stands, the work will speedily be completed, and it will be the aim of the common stockholders of the upper route and bay line to exercise their influence in both, so as to make the charges between Weldon and Baltimore the same by both routes, and thus to carry out the object of the legislature, manifested in all its action in relation to the Seaboard and Roanoke road, that of preventing an injurious competition between them. If they should be enabled to effect this, the injury to this company from the revival of the Portsmouth road will be but slight, and that to the Petersburg railroad company, though necessarily more serious, much less than would have resulted from the revival of the Portsmouth road by an entirely distinct interest.

It will be seen from what has been said, that this was the whole question. A revival of the Portsmouth railroad was the necessary consequence of the legislation in its favor, and this legislation was the result of the continued attempt to sustain an opposition by way of the James river and bay line to the companies north of Petersburg, which took away any motive on the part of the last named companies to oppose it; and the stockholders of the upper route, who were also stockholders in the bay line, in embarking in the work, have only made the best, under the circumstances, of an unavoidable necessity. Though the travel between the north and south will, after the reconstruction of the Portsmouth road, be divided between the two lines, it will be taken on both, as far as the action of the common stockholders can effect this, at revenue rates, and without efforts to influence it in either direction, unless indeed there should be again an attempt on the part of the Petersburg railroad company to get up and sustain a competing line for travel between City Point and Baltimore by way of the James river and the bay. In such a case, the Seaboard and Roanoke railroad and bay line would undoubtedly be placed in a more antagonistic attitude than ever to the Petersburg railroad. A policy, however, on the part of the Petersburg railroad company, which, in the present circumstances of the two lines, would be so destructive to the Petersburg railroad, is not to be presumed, and the board, therefore, rely with confidence on there being hereafter no injurious rivalry or competition between the Seaboard and Roanoke railroad and bay line and the upper route. In any case, they consider the reconstruction of the Seaboard and Roanoke

railroad, under its present auspices, as placing the continued prosperity of this company on a firmer and more secure foundation.

Signed by direction and on behalf of the board.

ED. ROBINSON, *President*

*Office Rich'd, Fred'g & P. R. Co.*  
*Richmond, May 24, 1851.*

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The examining committee made the following report, which was read and approved :

### REPORT.

To the Stockholders of the Rich'd, Fred'g and P. R. Co.

The undersigned, a committee appointed at the last meeting of the stockholders to inspect the road, depots, machine shops and fixtures, have performed that duty, and ask leave to make the following report :

In discharge of their duties, the committee have made two thorough examinations of the road, machine shops, depots, &c. (one during the fall and another about ten days ago,) and were pleased at each time to find the works of the company, in the main, in good order and very creditable to our worthy superintendent of transportation.

The depot and machine shops in Richmond are all in fine order, and seem to be conducted very properly and systematically. The press of business during the last summer made it necessary for the company to purchase two new passenger cars at the North, and the committee are pleased to find that the company have since had made in their own shops another one equal, if not superior, in point of finish and durability, to those purchased. Several of the engines have also been overhauled and improved. The stock of materials on hand is ample, and the committee are pleased to find that the valuable patterns lost by the late fire have been nearly all replaced.

The country depots are all in good order and seem to be well conducted, but it will be necessary in a short time to renew four of the water stations along the line, materials for which have been already provided.

The committee found all the bridges in good order, with the exception of the bridge over Hazel run, preparations for replacing which with one more substantial have been very properly, in the opinion of your committee, already commenced.

In their last report the committee mentioned that the company had provided themselves with a large quantity of new heavy rail, and they are pleased to find that since that time that bar has been laid down on upwards of forty miles of the road ; and so marked is the improvement in that part of the road that the committee, on the score of economy, safety and speed, earnestly recommend the propriety of the balance of the road being laid down with such bar as speedily as

the finances of the committee will justify. Indeed your committee are informed by the officers of the company that the stock of old iron now on hand can be exchanged for half of the required quantity.

The committee are also required by the resolution under which they act, to examine the books, &c. of the company. It could not be expected of the committee to devote so much time as would be necessary to make a thorough examination of all the books, vouchers, &c., but they made such examination as satisfied them that the books are neatly and scientifically kept.

All of which is respectfully submitted.

JOS. M. SHEPPARD,  
THOS. B. ANDERSON,  
EDM'D T. MORRIS.

*May 26th, 1851.*

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The meeting then went into the election of president and directors. On motion of Mr. E. T. Morris, Mr. Edwin Robinson was unanimously re-elected.

Messrs. Nicholas Mills, James Boshier and G. A. Myers were re-elected, and Mr. George W. Munford elected (all unanimously) on the part of the individual stockholders, and Mr. W. W. Crump was announced as the director on behalf of the commonwealth.

Messrs. Joseph M. Sheppard, Thomas B. Anderson and Ed. T. Morris were re-appointed the annual committee of examination, under the resolution adopted at the meeting of the stockholders in 1837.

The following resolution was then adopted :

*Resolved*, That the president and directors take such means in regard to publishing their report and the proceedings of this meeting as shall seem to them expedient.

And then the meeting adjourned.

Signed,

JAMES LYONS, *Chairman.*

Signed,

C. W. MACMURDO, *Sec'y.*





*Statement of the Affairs of the Richmond, Fredericksburg and Potomac*

<b>Cost of road and property:</b>				
<b>From Richmond to Aquia creek,</b>	-	-	-	<b>1,531,238 40</b>
<b>Debts due to the company:</b>				
<b>From individuals, on new stock,</b>	-	-	-	<b>3,365 00</b>
<b>Bills receivable,</b>	-	-	-	<b>107,703 28</b>
<b>Sterling bonds,</b>	-	-	-	<b>1,338 67</b>
<b>From sundries in open account,</b>	-	-	-	<b>17,345 50</b>
				<b>129,752 45</b>
<b>Investments:</b>				
<b>Stock purchase,</b>	-	-	-	<b>30,920 48</b>
<b>Bonds Washington and Fredericksburg steamboat company,</b>				<b>33,900 00</b>
<b>Stock Washington and Fredericksburg steamboat company,</b>				<b>27,800 00</b>
				<b>92,620 48</b>
<b>Cash on hand 31st March 1851,</b>	-	-	-	<b>23,937 42</b>

**\$ 1,777,548 75**

***Railroad Company from the commencement of the work to the 31st March 1851.***

<b>Capital stock :</b>			
<b>Subscribed</b> by the state, 2,752 shares old stock,	-	275,200 00	
“ by individuals, 4,248 shares old stock,	-	424,800 00	
“ by “ 3,000 shares new stock,	-	300,000 00	
		<hr/>	1,000,000 00
<b>Debts due by the company, interest semi-annually :</b>			
<b>Bonds</b> due in London in 1860, £67,500 sterling—proceeds,		324,005 61	
<b>Bonds</b> due in Philadelphia in 1856, and convertible,	-	60,000 00	
<b>Certificates</b> of debt issued for dividends, and due in 1857,		73,000 00	
<b>Certificates</b> of debt issued for dividends, and due in 1869,		146,000 00	
		<hr/>	603,005 61
<b>Debts due by bills and open account :</b>			
<b>Bills</b> payable,	-	5,312 17	
<b>Other</b> debts in open account,	-	25,425 16	
<b>Unpaid</b> dividends,	-	901 62	
		<hr/>	31,638 95
<b>Profit and loss :</b>			
<b>Receipts</b> from transportation since the commencement of the work,	-	2,669,034 62	
<b>Receipts</b> from real estate—for rents, &c.	-	5,329 87	
		<hr/>	2,674,364 49
<b>Off</b> expenses of transportation since commencement of the work, loss of bridges and depot by fire, interest, interest on new stock and certificates of debt,	-	1,921,296 94	
		<hr/>	753,067 55
<b>Off</b> dividends paid since the commencement,	-	610,163 36	
		<hr/>	142,904 19
			<hr/>
			<u>\$ 1,777,548 75</u>

C. W. MACMURDO, *Treasurer.**Richmond, 31st March 1851.*



**Statement of Receipts and Disbursements within the year ending the 31st March 1851.**

<b>Receipts:</b>			
Cash on hand 31st March 1850,	-	-	27,656 16
Capital stock—received of the stockholders,	-	-	22,526 55
Debts due to the company—received this amount,	-	-	17,548 32
Sterling bonds—received this amount,	-	-	1,253 33
Debts due by the company—increased this amount,	-	-	14,377 92
Rents of real estate—received this amount,	-	-	98 34
Transportation—received this amount,	-	-	271,427 37
<b>Disbursements:</b>			
Cash on hand 31st March, 1851,	-	-	23,937 42
Cost of road and property—increased this amount,	-	-	21,766 78
Stock purchase—invested this amount,	-	-	3,241 95
Bills receivable—invested this amount,	-	-	30,642 99
Convertible bonds—paid off this amount,	-	-	30,000 00
Unpaid dividends—paid off this amount,	-	-	252 73
<b>Expenses of transportation:</b>			
Paid this sum,	-	102,378 18	
Paid for 1,015 tons new iron,	-	42,525 29	
		<hr/>	144,903 47
Interest—paid this sum,	-	-	13,884 33
Interest on new stock—paid this sum,	-	-	4,074 46
Interest on certificates of debt—paid this sum,	-	-	11,358 21
Dividends—paid this sum,	-	-	63,847 95
Depot and property—loss by fire,	-	-	6,977 70
			<hr/>
			\$ 354,887 99    354,887 99
			<hr/>

C. W. MACMURDO, *Treasurer.**Richmond, 31st March 1851.*



## REPORT OF PRESIDENT AND DIRECTORS.

OFFICE RICHMOND, FRED. AND POTO. R. Co.  
*Richmond*, November 1st, 1851.

JAMES BROWN, JR. ESQ.  
*Second Auditor.*

SIR,

In conformity with the provisions of chapter 72d of the Code of Virginia, I hand you herewith tabular statements shewing the condition of this company on the 30th September 1851, the receipts and expenditures for the year ending on that day, a list of the stockholders of the company and the report of the president and directors to the stockholders at their annual meeting on the 26th of May last, with accompanying documents.

The whole income of the company during the past year, it will be perceived, was \$243,732 55, and the whole expenditures of the company for expenses for transportation, improvements of road and property, and the payment of a judgment in favor of Margaret L. Heth and others, were \$141,427 78, leaving a balance of \$102,304 77. Out of this balance the board were enabled, after paying the usual dividend of seven per cent. and all charges of interest, amounting together to \$92,657 88, to add the sum of \$9,646 89 to their available means for the payment of the usual dividend, in the event of a temporary diminution in their receipts.

Their contingent fund provided for this purpose, and entered under the head of profit and loss, it will be seen, amounted, on the 30th of September last, to the sum of \$164,519 74.

The income of the company during the past year, it will be perceived was, \$24,768 29 less than that of the year ending the 30th September 1850. The diminution has been owing to the completion and use of the eastern extension of the Louisa or Virginia Central railroad, the receipts of which have of course been increased in a corresponding proportion. This diversion to another road of what the board deem the legitimate business of the work committed to their charge, and one guaranteed to it in its charter, they trust will prove but temporary. They hope so, as well on account of the cause of improvements generally in Virginia, as of this company, for it can scarcely be supposed that subscriptions will be made willingly to the stocks of other companies in the state, unless the rights conferred on this company in its charter should be recognized and sustained.

The board of directors are continuing to lay down a heavier rail than that hitherto used by them, and by the date of their next annual report to the Board of public works, there will probably have been laid down a rail two and a half inches wide by three-fourths of an inch thick (or of nearly twice the weight of the original rail) throughout the whole length of their road. The board would have preferred changing their plan of superstructure entirely, and laying down a

heavy edge rail ; but in view of the competing lines authorized by the legislature, (more especially that between Richmond and the Junction,) the stockholders were unwilling to incur any outlay on their work ~~is~~ *anticipation* of an increased business which might not be realized. The present superstructure, with the heavier rail now being laid on it, is amply adequate to *the present* business of the company. If this business should increase, as the board hope it will, and the travel now diverted from them by the Louisa extension be restored, the board are satisfied that the stockholders will gladly authorize them to incur any expenditure which may be requisite for its proper accommodation at the lowest rates. The board of directors need scarcely add on this subject to the Board of public works, that the larger the business on a line, the lower the rates at which it can be accommodated. Of course any unnecessary diversion of trade or travel from a route must, to a corresponding extent, increase the burthen on those who necessarily make use of it.

Submitted on behalf and by order of the board of directors.

ED. ROBINSON, *President.*





*Statement of the Affairs of the Richmond, Fredericksburg and Potomac*


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<b>Cost of road and property :</b>			
From Richmond to Aquia creek,	-	-	1,531,238 40
			<u>1,531,238 40</u>
<b>Debts due to the company :</b>			
From individuals on new stock,	-	-	3,345 00
From bills receivable,	-	-	103,717 13
From sundries in open account,	-	-	40,628 96
			<u>147,691 09</u>
<b>Investments :</b>			
Certificates of debt of this company,	-	-	28,681 48
Stock of the Washington and Fredericksburg steamboat company,	-	-	27,800 00
Bonds of the Washington and Fredericksburg steamboat company,	-	-	25,000 00
			<u>81,481 48</u>
Cash on hand 30th September 1851,	-	-	50,555 89

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**\$1,810,966 86**

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*Railroad Company from the commencement to the 30th September 1851.*

<b>Capital stock :</b>				
Subscribed by the state	2752 shares, old,	-	275,200 00	
Subscribed by individuals,	4248 " "	-	424,800 00	
" "	3000 " new,	-	300,000 00	
			<u>1,000,000 00</u>	
<b>Debts due by the company—interest semi-annually :</b>				
Bonds due in London in 1860, £ 67,500 st.—proceeds,	-	-	324,005 61	
Bonds due in Philadelphia in 1856, and convertible,	-	-	60,000 00	
Certificates of debt issued for dividends and due in 1857,	-	-	73,000 00	
" " " " " " 1869,	-	-	146,000 00	
			<u>603,005 61</u>	
<b>Debts due by bills and open account :</b>				
Bills payable,	-	-	8,984 54	
Unpaid dividends,	-	-	969 28	
Other debts in open account,	-	-	33,487 09	
			<u>43,441 51</u>	
<b>Profit and loss :</b>				
Receipts from transportation since the commencement of the work,	-	-	2,781,634 46	
From rents of real estate,	-	-	5,354 87	
			<u>2,786,989 33</u>	
Of expenses of transportation since the commencement of the work, loss of bridges and depot by fire, interest, interest on new stock, and interest on certificate of debt,	-	-	1,979,520 50	
			<u>807,468 83</u>	
Of dividends paid since the commencement,	-	-	642,949 09	
			<u>164,519 74</u>	
			<u>\$1,810,966 86</u>	

C. W. MACMURDO, *Treasurer.*

*Richmond, 1st October 1851.*

*Statement of Receipts and Disbursements within the year***Receipts:**

Cash on hand 30th September 1850,	-	-	66,471 45
Capital stock, received of the stockholders,	-	-	1,485 00
Washington and Fredericksburg steamboat bonds, received			
this sum,	-	-	8,900 00
Debts due by the company. increased this sum,	-	-	6,509 89
Rents, real estate, received this sum,	-	-	75 00
Transportation, received this sum,	-	-	243,657 55

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**\$327,098 89**

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ending the 30th day of September 1851.

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Disbursements:

Cost of road and property, paid Mrs. Heth, and for new coaches and heavy iron,	-	-	21,279 06	
Debts due to the company, increased this sum,	-	-	13,516 68	
Certificates of debt of this company, invested this sum,	-	-	873 50	
Bills receivable, invested this sum,	-	-	28,067 16	
Expenses of transportation, paid this sum,	-	-	120,148 72	
Interest, paid this sum,	-	-	12,432 96	
Interest on new stock, paid this sum,	-	-	3,691 65	
Interest on certificate of debt, paid this sum,	-	-	11,261 22	
Dividends, paid this sum,	-	-	65,272 05	
Cash on hand 30th September 1851,	-	-	50,555 89	
				<u>\$ 327,098 89</u>

*Statement of Officers of the Richmond, Fredericksburg and Potomac Railroad Company, and Agents connected therewith, together with their Salaries.*

OFFICERS.	NAMES.	To what account charged.	Amount.
President, -	Edwin Robinson, -	Officers' salaries, -	3,000
Sup't transportation, -	Thos. Sharp, -	Do. -	2,500
Treas'r and secretary, -	C. W. Macmurdo, -	Do. -	1,800
Freight clerk, -	Wm. H. Allen, -	Depot expenses, -	800
Ticket clerk, -	J. B. Winston, -	Do. -	600
Depot agent, -	M. W. Bailey, <i>Fredericksburg</i> , -	Do. -	450
Do. -	Wm. F. Dabney, <i>Guinney's</i> , -	Do. -	270
Do. -	R. H. Hoomes, <i>Milford</i> , -	Do. -	270
Do. -	R. Turner, <i>Polecat</i> , -	Do. -	245
Do. -	Charles Woolfolk, <i>Chesterfield</i> , -	Do. -	270
Do. -	James M. Taylor, <i>Taylorsville</i> , -	Do. -	270
Overseer of road, -	John L. Thompson, -	Repairs of road, -	420
Do. -	D. G. Bibb, -	Do. -	420
Do. -	P. Haden, -	Do. -	420
Do. -	L. Tramham, -	Do. -	420
Do. -	P. H. Burruss, -	Do. -	420
Foreman of machine shops, -	Irvin Smith, -	Reps. engs. cars, &c. -	900

**RICHMOND AND PETERSBURG RAILROAD COMPANY.**

*Sixteenth Meeting of the Stockholders, held on Tuesday, May 27th, 1851.*

At a meeting of stockholders of the Richmond and Petersburg railroad company, at the office of the company in Richmond, on Tuesday, 27th May 1851 :

Judge John F. May was appointed chairman of the meeting, and John Williams secretary.

There being present, in person and by proxy, private stockholders entitled to 1,957 votes, and the proxy of the Board of public works, James Lyons, Esq. entitled to 505 votes, being in all 2,462, (the whole number that could be given being 2,698,) the meeting proceeded to business.

The following report was presented by the president and directors, and read :

**ANNUAL REPORT.**

The board of directors of the Richmond and Petersburg railroad company respectfully submit to the stockholders their annual report of the condition of the affairs of the company.

It will be seen from the accompanying statements, that the gross income of the company for the year ending the 30th of April last, was \$117,409 61, being an increase on the income of the previous year of \$17,110 81, and that the expenses of the past year were \$76,026 09, making an improvement in the business of the company, as compared with that of the previous year, of \$13,627 26.

Out of the income of the past year the board have been enabled to reduce the liabilities of the company the sum of 27,200 55, leaving their whole indebtedness at this time \$112,574 67.

Under these circumstances the board of directors might, it is believed, at an early day commence the payment of a moderate dividend to the stockholders, if they could either convert into stock or fund the debts now due, or shortly to become due by the company.

With a view to the former object, the board of directors, in compliance with the instructions of the stockholders at their last annual meeting, applied to the legislature for the right to issue new shares of stock at a reduced value, without the necessity of reducing the whole capital stock of the company, as required by the act of April 1848. They at the same time applied to be relieved of the payment of the dividend bonds due the state, on condition of constructing a bridge across the Appomattox river at Petersburg, to connect with the Petersburg and Roanoke and Southside roads. They regret that their application failed, and in consequence there is no prospect, notwithstanding the improved condition of the company, of the early payment of a dividend to the stockholders, unless it should be deemed advisable to reduce the capital stock of the company, under the act of April 1848, and be then found practicable to create new shares at a reduced rate, or it should be in the power of the company to fund the debts now due, and to extend the period of those shortly

maturing. The board of directors would recommend the effort being made to extend or renew the loans of the company to a period not earlier than the 1st of July 1859. Should it prove successful, they entertain a strong confidence that a dividend of three per cent. may be paid both to the state and private stockholders.

Signed on behalf of the board.

WIRT ROBINSON, *President.*

*May 27th, 1851.*

Whereupon, the said report and the documents therein referred to were received, approved and ordered to be recorded.

The following report of the committee of examination was read:

The undersigned, a committee appointed at the last annual meeting in pursuance of a standing order of the stockholders, respectfully report:

That on a careful and sufficient personal examination, they find the road, bridges, water stations, work shops, cars, engines and depots of this company in excellent order—improved decidedly since last reported upon—and comparing favorably, as they believe, with the works and the condition of any road of like construction in this country. At Petersburg the depot has been repaired, a new shed thirty by eighty feet has been erected for the reception of tobacco, a new house for the hands built, and about four hundred feet of tressel work and track made for the accommodation of the increased coal trade there. In Richmond the depot has been improved by the erection of a fire-proof safe for the preservation of the books and papers of the company, and by the introduction of gas for light; and additional tools and new and improved machinery have been provided in the shops. The bridge over James river has been put in thorough repair, and materials have been purchased and are now on hand for repainting it. The current books and accounts of the company were examined sufficiently to satisfy your committee that they are faithfully, accurately and neatly kept. The system of checks and balances which prevails in the office, as well with regard to the *receipts* as to the expenditures, would seem to render it difficult for any error or defalcation to occur without immediate detection. Nevertheless, your committee do not doubt that it would be more satisfactory, both to the officers in charge of this department and to the stockholders, that a critical examination and comparison of the books with the vouchers should be made by a competent accountant. Some enquiry for such a person was recently instituted by your committee; but the enquiry having been too long delayed to admit of the work being executed in a satisfactory manner prior to this meeting of the stockholders, was postponed for another year, unless it should be your pleasure to order such an investigation now, under the direction of a new committee.

All of which is respectfully submitted.

THOMAS H. ELLIS,  
JAMES BOSHER,  
JACOB F. BARNES.



Whereupon, the said report was received, approved and ordered to be recorded.

The following resolution, offered by Mr. Holden Rhodes, was unanimously adopted:

*Resolved*, For the purpose of extending, in whole or in part, the debts of the company, or of renewing the same, that the president and treasurer be and they are hereby authorized to issue certificates of debt, payable not earlier than the 1st day of July 1859, the interest on the said certificates to be payable semi-annually, and the said certificates to be convertible into stock of the company at par, at the option of the holder, and that the president and directors be authorized to give such security on the property of the company, for the payment of the interest and principal of the said certificates, as they may deem advisable.

And whereas no action appears yet to have been had, under a resolution adopted at the meeting of stockholders on the 20th of November 1843, when an act passed March 25th, 1843, entitled "An act converting into stock the state's loan to sundry railroad companies, and for other purposes," was accepted, which resolution was in the following words, viz: "*Resolved*, That at the times of making to the commonwealth the semi-annual dividends required by the said act, the board of directors be and they are hereby instructed to pass to the credit of the individual stockholders of the company any surplus of nett profits, not exceeding one half per cent. on the amount of the individual stock, the said surplus to be paid over to the individual stockholders respectively, forthwith, if the company's affairs permit; or if otherwise, to be paid with interest, whenever the situation of the company may admit of its being done:" Be it therefore

*Resolved*, That the president and treasurer be authorized to issue certificates of debt as above authorized, to any stockholder or his assigns, who may be willing to receive the same, in lieu of the amount to which he or they would be entitled under the above resolution.

The meeting then proceeded to the election of officers; whereupon, Mr. Wirt Robinson was unanimously elected president of the company.

Messrs. Richard Barton Haxall and Holden Rhodes were unanimously elected directors on behalf of the stockholders.

Messrs. Francis E. Rives, James H. Cox and Roscoe B. Heath were announced to have been appointed directors on behalf of the state by the Board of public works.

Messrs. James Bosher and Jacob F. Barns, Dr. Charles S. Mills, and Messrs. Samuel Mordecai and Frederick Anderson were appointed the committee of examination.

*Resolved*, That the president and directors take such measures in regard to publishing their report and the proceedings of this meeting as shall seem to them expedient.

On motion, the meeting then adjourned.

J. F. MAY, *Chairman*.

JOHN WILLIAMS, *Secretary*.

*Statement of the Affairs of the Richmond and Petersburg Railroad*

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Cost of road and property :					
From Richmond to Petersburg, including interest,	-			894,801	71
Of branch road to Port Walthall, including purchases of land,					
wharves, coal tracks, cars and steamer Chesapeake,				48,489	09
					<u>943,290 80</u>
Debts due to the company :					
This company's stock taken for debt,	-	-		5,376	06
Open accounts,	-	-	-	8,422	24
					<u>13,798 30</u>
Cash on hand,	-	-	-	-	4,870 45
					<u>\$ 961,959 55</u>

*Company from the commencement of the work to the 1st of May 1851.*

**Capital stock :**

Subscribed by individuals,	300,000 shares,	300,000 00	
“ state, old stock,	200,000 “	200,000 00	
new “	1,856 “	185,600 00	
		<u>          </u>	685,600 00

**Debts due by the company:**

Bonds due in London in 1853, £12,300 st'g. at par.		54,666 67	
Bonds due in Richmond,	-	24,500 00	
		<u>          </u>	79,166 67
Dividend bonds to the state,	-	-	33,408 00
Debt due by open account,	-	-	18 92
Profit since the commencement of transportation,	-	-	163,765 96
			<u>          </u>
			<u><u>\$ 961,959 55</u></u>

**JOHN WILLIAMS, Treasurer.**

*Richmond, 1st May 1851.*

*Statement of Income from Transportation from 1st May 1850 to 1st May 1851.*

MONTHS.	Local travel.	Through travel.	Freight.	Branch road freight.	Freight of Clover mill coal.	Cl. Mill travel and miscellaneous freight.	TOTAL.
1850—May, .	2522 75	1100 88	2474 43	157 70	1796 00	324 39	8376 15
June, .	2176 05	1033 39	2836 84	148 02	1223 50	284 63	7701 43
July, .	2044 04	1540 08	2369 96	173 36	1350 60	236 29	8614 39
August, .	2761 00	2160 64	1708 02	1550 88	2270 00	195 13	10645 67
Sept. .	2876 33	2537 52	1539 44	197 33	2538 70	229 58	9918 90
October, .	2985 74	1474 03	817 89	979 74	3153 70	328 69	9739 79
Novem'r, .	2840 06	928 89	907 84	675 37	3326 80	344 78	9094 34
Decem'r, .	3714 49	801 08	864 52	6 48	2254 30	149 96	7790 80
1851—January, .	3335 37	957 71	1157 78	785 18	1955 70	159 44	8351 19
February, .	3104 49	1464 67	1189 81	666 54	2408 60	169 52	9003 63
March, .	3074 20	1913 71	1353 09	2365 85	1800 97	158 97	11077 79
April, .	2739 12	940 18	1650 38	847 87	1720 00	157 26	8064 41
	\$ 35074 24	16861 78	16870 00	8554 32	25798 47	2738 62	107897 43
Transportation of mail, .							5,816 48
Travel and freight per Norfolk and Waltham steamers, .							3,584 25
Tolls on James river bridge, .							111 50
							<u>\$117,409 67</u>

JOHN WILLIAMS, Treasurer.

Richmond, 1st May 1851.

*Statement of Transportation Expenses from 1st May 1850, to 1st May 1851.*

Repairs of railroad,	-	-	-	-	-	14,685 64
Repairs of engines and cars,	-	-	-	-	-	20,971 04
Train expenses, including Clover Hill expenses,	-	-	-	-	-	14,899 95
Depot expenses, including watching James river bridge,	-	-	-	-	-	7,778 10
Repairs of bridges,	-	-	-	-	-	2,180 66
Transportation of passengers, mail and baggage,	-	-	-	-	-	1,518 52
Officers' salaries,	-	-	-	-	-	4,425 00
Postages, newspapers, advertising and printing,	-	-	-	-	-	496 70
Train losses and damages, including coal,	-	-	-	-	-	558 16
Contingent expenses and insurance against fire,	-	-	-	-	-	873 76
Branch road expenses,	-	-	-	-	-	2,591 83
Repairs of depots,	-	-	-	-	-	3,679 55
Office expenses,	-	-	-	-	-	158 96
Expenses of steamer Chesapeake,	-	-	-	-	-	1,043 98
Repairs of turnpike,	-	-	-	-	-	164 24
						<u>\$ 76,026 09</u>

JOHN WILLIAMS, *Treasurer.**Richmond, 1st May 1851.*

*Statement of Receipts and Disbursements within the year ending 30th April 1851.*

Receipts:				
Cash on hand 30th April 1850	-	-	-	2,294 01
Certificate of debt—received this sum,	-	-	-	500 00
Transportation, do.	-	-	-	117,409 67
Disbursements:				
Cost of road and property—increased this sum,	-	-	3,943 65	
Liabilities of the company—decreased this sum,	-	-	27,200 55	
Transportation—expenses of transportation,	-	-	76,026 09	
Interest—paid the state and on loans,	-	-	4,233 36	
Cash on hand 30th April 1851,	-	-	4,870 45	
Debts due to the company—increased this sum,	-	-	3,929 58	
			\$120,203 68	120,203 68

JOHN WILLIAMS, *Treasurer.*

*Richmond, 1st May 1851.*

## REPORT OF THE BOARD OF DIRECTORS.

The board of directors of the Richmond and Petersburg railroad company respectfully submit the accompanying statements, shewing the condition of the affairs of the company on the 30th of September 1851 ; also their report to and the proceedings of the stockholders at their annual meeting on the 27th of May last.

Under the authority given at the meeting of stockholders, the board of directors have endeavored to extend the period of payment of the debts of the company, by the issue of bonds payable on the first of July 1859, and in the mean time convertible into stock, but have found it impracticable to do so, except as regards the amount passed to the credit of the individual stockholders under the resolution of the stockholders of the 20th of November 1843. The board of directors fear there is but little probability of their being able to fund the other debts of the company now, or in a short time payable, unless by the issue of shares or a loan convertible into stock at a lower rate than the present par value. The present market price of the stock being about thirty-five dollars per share, it would certainly seem to be an advantageous operation if new shares could be issued at fifty dollars to the extent necessary to liquidate the present indebtedness of the company, and to enable the board of directors henceforth to pay regular dividends to the state and other stockholders. If it should be the pleasure of the legislature to grant the company the right to do this, without the necessity of reducing the whole capital stock of the company as required by the act of April 1848, the debts of the company might, it is believed, be either converted into stock or a debt payable at a remote date, and dividends of three per cent. at once be paid to the commonwealth and other stockholders.

The board of directors beg leave in this to renew the suggestion made in their last annual report as to the expediency of a release to this company of the dividend bonds due the state, on condition of this company's constructing a railroad bridge across the Appomattox river, to connect with the Southside and Petersburg railroad. In view of the great benefit of such a connection to other works in which the state is interested, as well as to this, they cannot but believe such a measure one of enlightened policy in reference to the interests of the state both as a stockholder and as a community. On the other hand, it would seem but sheer justice to the private stockholders of the company, in view of the patronage of the legislature which has been extended to adverse lines of improvement.

Signed on behalf of the board.

WIRT ROBINSON, *President.*

**Statement of the Affairs of the Richmond and Petersburg Railroad Com.**

<b>Cost of road and property:</b>				
<b>From Richmond to Petersburg,</b>	-	-	.	896,648 12
<b>Of branch road to Port Walthall,</b>	-	-	-	48,489 09
				<u>945,137 21</u>
<b>Debts due to the company :</b>				
<b>By individuals on stock,</b>	-	-	-	350 00
<b>Stock purchase,</b>	-	-	-	5,376 06
<b>Open accounts,</b>	-	-	-	7,766 42
				<u>13,492 48</u>
<b>Cash on hand,</b>	-	-	-	4,341 58



*pany from the commencement of the work to the 1st of October 1851.*

**Capital stock :**

Subscribed by individuals 3,000 shares,	-	-	300,000 00	
Do. by the state, old stock, 2,000 shares,	-	-	200,000 00	
Do. do. new stock, 1856 shares,	-	-	185,600 00	
			<u>685,600 00</u>	

**Debts due by the company :**

Bonds due in London in 1853, £12,300 sterling,	-	-	54,666 67	
Bonds due in Richmond,	-	-	12,000 00	
			<u>66,666 67</u>	
Bonds due the state,	-	-	-	33,408 00
Certificates of debt payable 1st July 1859, pursuant to resolution adopted at the annual meeting on 27th May 1851,	-	-	-	33,422 85
Profit and loss,	-	-	-	143,873 76
				<u>\$ 962,971 28</u>

**JOHN WILLIAMS, Treasurer.**

*Richmond, 1st October 1851.*

**Statement of Receipts and Disbursements in the year ending 30th September 1851.****Receipts:**

Cash on hand 30th September 1850,	-	-	-	8,171 73
Transportation received,	-	-	-	116,359 90
Profit and loss, for certificates of debt issued,	-	-	-	33,423 85

**Disbursements:**

Cost of road and property, increased,	-	3,941 54	
Transportation expenses,	-	79,110 15	
Interest paid,	-	3,966 20	
Notes and open accounts due by the company, decreased,	-	15,456 17	
Obupon bonds	-	16,500 00	
Open accounts due to the company, increased,	-	1,909 28	
Certificates of debt payable 1st July 1859,	-	33,423 85	
Cash on hand 30th September 1851, -	-	4,341 59	
		<u>\$157,946 78</u>	<u>157,946 78</u>

JNO. WILLIAMS, Treasurer.

Richmond, 1st October 1851.

*Detailed Statement of Receipts in the year ending 30th September 1851.*

Months.	Local Travel.	Through Travel.	Freight.	Branch road fr'ght.	Freight of Clover Hill Coal.	Cl. Hill Tra- vel and Mis- cellaneous freight.	Total.
1850.							
October, -	2985 74	1474 03	817 89	979 74	3153 70	328 69	9739 79
November, -	2840 66	928 89	907 84	675 37	3326 80	344 78	9024 34
December, -	3714 49	801 08	864 52	6 48	2254 30	149 95	7790 82
1851.							
January, -	3335 37	957 71	1157 78	785 18	1955 70	159 44	8351 18
February, -	3104 49	1464 67	1189 81	666 54	2408 60	169 52	9003 63
March, -	3074 20	1913 71	1353 09	2365 85	1800 97	158 97	10666 79
April, -	2739 12	949 18	1650 38	847 87	1720 60	157 26	8064 41
May, -	2699 54	1028 69	1644 53	177 34	1666 82	306 80	7523 72
June, -	3018 94	874 18	2016 65	277 45	1274 27	243 84	7705 33
July, -	3523 37	1047 89	1984 96	5 87	1732 02	139 39	8433 50
August, -	3147 05	1776 97	1789 57	915 99	1903 42	71 82	9604 82
September, -	3222 37	2118 04	1717 55	1505 74	2139 25	180 11	10883 06
	37405 34	15335 04	17094 57	9209 42	25336 45	2410 57	106791 39
Transportation of mail,	-	-	-	-	-	-	5815 48
Travel and freight per Norfolk and Waltham steamers,	-	-	-	-	-	-	3598 96
Tolls on James river bridge,	-	-	-	-	-	-	146 37
							<u>\$116352 20</u>

JNO. WILLIAMS, *Treasurer.**Richmond, 1st October 1851.*

*Statement of Freight transported on the Richmond and Petersburg Railroad, on the Branch Road to Port Walthall in the year ending 30th September 1851.*

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Tobacco,	-	-	-	-	7,726	hhds.
Cotton,	-	-	-	-	1,427	bales.
Flour,	-	-	-	-	85,424½	bbls.
Coal,	-	-	-	-	1,400,640	bushels.

Groceries, dry goods and miscellaneous freight, amounting to \$ 11,294 98

*Statement shewing the number of Officers of the Richmond and Petersburg Railroad Company, and the compensation of each.*

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President,	-	-	-	per annum,	\$1,500
Clerk and Treasurer,	-	-	-	"	1,500
One clerk at Richmond depot,	-	-	-	"	600
One clerk at Petersburg depot,	-	-	-	"	700



**PETERSBURG RAILROAD COMPANY.**

OFFICE PETERSBURG RAILROAD Co.  
*Petersburg, Nov. 24, 1851.*

**JAMES BROWN, JR.**  
*Second Auditor.*

**SIR,**

I enclose you the last annual report of the stockholders of the Petersburg railroad company, and also the customary financial statements for the 12 months ending September 30th, 1851.

Since the date of the last report, we have completed the reconstruction of the road with edge-rails, and added considerably to its equipments; and in these respects, as well as in its prosperous condition, we think it will now compare favorably with the best improvements of the kind in the country.

I remain respectfully,

Your ob't serv't,

**H. D. BIRD, Pres't.**

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*Twenty-first Annual Meeting of the Stockholders of the Petersburg Railroad Company.*

At the annual meeting of the stockholders of the Petersburg railroad company, held on Monday, the 3d day of March 1851, there were represented by the owners and proxies 6,096 shares of the stock, entitled to 899 votes, upon which, being a quorum, the meeting was organized, by the appointment of A. Kevan, mayor of the city, as chairman, and D. May as secretary.

The president of the company, H. D. Bird, presented and read to the meeting the report of the board of directors, which, on motion, was ordered to be printed and distributed among the stockholders.

The meeting then proceeded to the election of officers, when H. D. Bird was unanimously re-elected president, and Joseph Bragg, R. B. Bolling and Benjamin Jones, directors.

The meeting then adjourned.

Signed,

**A. KEVAN, Chairman.**

**D. MAY, Sec'y.**

## REPORT OF THE BOARD OF DIRECTORS.

We present you with the customary financial statements of the company for the twelve months ending January 31st, 1851, and we take pleasure in calling your attention to the continued increase in the business of the road, and the consequent improvement in the affairs of the company.

The gross receipts of transportation for the year were \$211,129 17, which is \$30,675 18 greater than they were the year before. The charges of all kinds, including interest and sundry payments for new engines and cars, and other items not properly current expenses, amounting to \$28,987 90, the details of which are shewn in the accompanying statements, were \$114,949 55. This is \$6,307 75 less than they were the previous year.

The nett income was \$96,179 62. Out of this we paid a dividend of  $7\frac{1}{2}$  per cent., amounting to \$57,675, which left a surplus of \$38,504 62 towards paying for the new track of edge-rails which we are now laying.

The amount expended on account of this track during the last twelve months was \$118,232 35. Of this sum, the surplus above and the cash and other assets brought forward from last year, enable us to pay \$49,802 04 in cash, while \$68,430 31 was added temporarily to our indebtedness.

Our whole debt is now \$150,851 05. But from this must be deducted the cash on hand and the debts due the company \$15,346 39, and the value of the old railroad iron as far as taken up, worth at present prices about \$24,000, which would leave the nett amount of indebtedness \$111,504 66. Of this sum, \$14,409 81 was the amount of indebtedness before we commenced laying the new track, leaving \$97,094 85 incurred for that purpose to the first of this month.

At the date of our last annual report, it was only contemplated to rebuild the road with edge-rails as far as the Junction of the Greenville and Roanoke railroad; but the Wilmington company having commenced improving their whole road, and our business increasing so much, the necessity of finishing ours became more urgent. An advantageous contract for the necessary iron being offered at the same time, we availed ourselves of it, and part of the rails have already arrived, and the remainder will be here in the course of a few weeks. We expect to have the whole track completed to Weldon by June or July next.

The amount expended for the new track so far, (except the fifteen miles laid some years ago, which was all paid for out of the surplus profits) is \$154,821 22. If we deduct from this the amount of indebtedness incurred on this account as above stated, it leaves the sum of \$57,726 37, paid for out of the surplus profits since December 1849, the date we commenced receiving the iron. We mention this to shew that we shall soon be able to pay off the whole debt contracted for it.

Deducting the value of the old iron from the cost of the new track



as above given, it leaves the nett cost of that improvement to the 31st of January, \$130,821 22. For this we have laid down twenty-nine miles of the track in the most substantial manner, and have iron and timber enough paid for to lay ten miles more. This will leave twelve miles to finish the road to Weldon. The cost of the whole improvement will not exceed \$165,000.

The board congratulate the stockholders on the near approach of the period when they will have a good and permanent track, and be released from the heavy extra expenses and the various inconveniences that attend a flat-bar railroad, and at a cost so small compared with the great value of the improvement to the interests of the company. The whole of this value cannot be estimated in money. While we have no doubt that it will reduce our yearly expenses from 20 to 25 per cent., yet this is but a part of the benefit we may expect to derive from it. It will add vastly to the capabilities of the road, enabling it to do the transportation with more expedition, security and certainty, and thus not only render it more attractive to travelers, but draw to it a larger amount of freight business.

The board desire further to congratulate the stockholders on the increasing prospect of the improvement and extension of the roads south of us. The Wilmington company, as we stated above, are rebuilding their road with edge-rails, and they will finish it in the course of a few months. By the end of this year the cars are expected to be running on forty to fifty miles of the Manchester road. At our Gaston end there is every reason to expect that the late stockholders of the Raleigh and Gaston company will accept the act passed by the last session of the legislature of North Carolina, and rebuild the road. And last, but most important to your interests, we have the assurance that the whole of the North Carolina railroad will be put under contract this year. This road, you are well aware, will connect with the South Carolina railroads, and of course it will greatly increase our travel. But this we look upon as a small part of the advantages we expect to derive from the construction of that road. When it reaches Salisbury, it will be over half way through the state of North Carolina; and the people there already contemplate extending it to Tennessee. The completion of these improvements cannot fail to increase the present prosperous condition of the company, and place it on a solid and enduring basis.

By order of the board of directors.

H. D. BIRD, *President.*

*Statement of the Affairs of the Petersburg Railroad Company, January 31st, 1851.*

Capital paid in,	-	-	-	-	-	769,000 00
Debts due by the company,	-	-	-	-	-	150,851 05
Profit and loss,	-	-	-	-	-	19,316 56
						<u>\$ 939,167 61</u>
Cost of railroad,	-	-	-	-	-	769,000 00
New track,	-	-	-	-	-	154,821 22
Debts due the company,	-	-	-	-	-	9,716 43
Cash,	-	-	-	-	-	5,629 96
						<u>\$ 939,167 61</u>

*Receipts and Expenses of Transportation of the Petersburg Railroad Company for the twelve months ending January 31st, 1851.*

Receipts:						
Freight,	-	-	-	-	-	98,941 06
Passengers,	-	-	-	-	-	96,188 11
Mail,	-	-	-	-	-	16,000 00
						<u>211,129 17</u>
Expenses:						
Officers' salaries, repairs of road, engines and cars, and all current expenses,	-	-	-	-	85,961 65	
Cost of one new engine, two new passenger cars, twelve freight cars and eighteen trucks,	-	-	-	-	21,135 00	
Cost of our portion of shed at Weldon,	-	-	-	-	628 12	
F. E. Rives, on account of contract,	-	-	-	-	3,000 00	
Interest account,	-	-	-	-	4,224 78	
					<u>114,949 55</u>	
					Nett income,	<u>\$ 96,179 62</u>

*General Statement of the Receipts and Disbursements of the Petersburg Railroad Company for the twelve months ending January 31, 1851.*

Receipts:						
Cash on hand January 31st, 1851,	-	-	-	-	-	10,084 34
Received of the debts due the company,	-	-	-	-	-	8,968 36
Nett income as above,	-	-	-	-	-	96,179 62
Increase of the debt for new track,	-	-	-	-	-	68,430 31
						<u>\$ 183,662 63</u>
Disbursements:						
Amount expended for iron, rails, spikes, timber and labor on new track during the twelve months,	-	-	-	-	-	118,232 35
Dividends of July and January, 7½ per cent.,	-	-	-	-	-	57,675 00
Bad debts charged to profit and loss,	-	-	-	-	-	2,125 32
Cash on hand January 31st, 1851,	-	-	-	-	-	5,629 96
						<u>\$ 183,662 63</u>

## COMPARATIVE STATEMENT.

			Jan. 31, 1850.	Jan. 31, 1851.	Increase.	Decrease.
Capital paid in,	-	-	769000 00	769000 00		
Debt,	-	-	82420 74	150851 05	68430 31	
Profit and loss,	-	-	2975 56	19316 56		
			<b>\$ 854396 30</b>	<b>939167 61</b>		
Cost of road,	-	-	789038 30	769000 00	-	20038 30*
New track,	-	-	36588 87	154821 22	118232 35	
Debts due the company,	-	-	18684 79	9716 43	-	8968 36
Cash,	-	-	10084 34	5629 96		
			<b>\$ 854396 30</b>	<b>939167 61</b>		
Receipts of transportation,	-	-	180453 99	211129 17	30675 18	
Expenses,	-	-	121257 30	114949 55	-	6307 75
Nett income,	-	-	<b>\$ 59196 69</b>	<b>96179 62</b>	<b>36982 93</b>	
Dividend,	-	-	7 per cent.	7½ per cent.		

\* Charged to profit and loss to reduce the cost of the road to the amount of capital paid in.

*Statement of the Affairs of the Petersburg Railroad Company September 30th,  
1851.*

Capital stock owned by corporation of Petersburg,	-	367,600 00	
"                    "                    individuals,	-	410,400 00	
			<u>769,000 00</u>
Debts due by the company:			
Bonds due in 1856,	-	37,101 67	
Bills payable,	-	92,292 94	
State of Virginia,	-	16,676 70	
Greensville railroad company,	-	10,261 38	
Individuals in account,	-	18,847 82	
Dividends unpaid,	-	1,660 69	
			<u>176,841 20</u>
Profit and loss,	-		35,447 50
			<u>\$ 981,288 70</u>
Cost of railroad,	-		769,000 00
Cost of new track,	-		195,410 20
Due by post office department,	-	4,300 00	
by agents for through travel,	-	2,976 80	
Raleigh and Gaston road,	-	1,354 17	
Freight outstanding,	-	4,352 72	
Due by individuals in account,	-	623 10	
			<u>13,606 79</u>
Cash,	-		3,271 71
			<u>\$ 981,288 70</u>

In addition to the cash and other assets as above, the company has 1,300 tons of old iron on hand worth at present prices, \$ 32,500.

*Receipts and Disbursements of the Petersburg Railroad Company for the twelve  
months ending September 30th, 1851.*

Receipts:			
Cash on hand Sept. 30th, 1850,	-		13,790 12
Gross amount of transportation,	-		199,468 96
Increase of debt due for new iron,	-		55,056 64
Received of the debts due the company,	-		3,237 44
			<u>\$ 271,553 06</u>
Disbursements:			
Expenses of transportation,	-		99,245 74
Expended on new track,	-		78,604 89
For a new locomotive,	-		7,300 00
2 new coaches, and 1 baggage car,	-		5,250 00
30 new freight cars,	-		17,415 00
Interest account,	-		6,635 72
Dividends of January and July, 7 per cent.	-		53,830 00
Cash on hand,	-		3,271 71
			<u>\$ 271,553 06</u>

*Comparative View of the Affairs of the Petersburg Railroad Company.*

				September 30, 1850.	September 30, 1851.	Dr.	Cr.
Stock,	-	-	-	769000 00	769000 00		
Debt,	-	-	-	121784 56	176841 20	55056 64	
Profit and loss,	-	-	-	45693 40	35447 50	-	10245 90
				936477 96	981288 70		
Cost of railroad,	-	-	-	789038 30	769000 00	20038 30	
Cost of new track,	-	-	-	116805 31	195410 20	-	78604 89
Debts due the company,	-	-	-	16844 23	13606 79	3237 44	
Cash,	-	-	-	13790 12	3271 71	10518 41	
				\$ 936477 96	981288 70	88850 79	88850 79

*Transportation on the Petersburg Railroad for the year ending 30th September 1851.*

	Bales Cotton.	Hhds. Tob'co.	Bush. Grain.	Bbls. Flour.	Boxes manufact'd Tobacco.	Tons in & out.	Freight.	Passengers.	Mail.	GREENSVILLE ROAD.			Total.
										Freight.	Passengers.	Mail.	
1850.													
October,	1420	141	12404	135	4074	-	\$ 8380 81	4140	\$ 8458 76	\$ 1261 37	\$ 351 05	\$ 66 67	\$ 19259 81
November,	2887	174	7025	289	3941	-	7222 45	3648	6739 26	1261 38	282 49	66 67	16204 61
December,	2567	185	5637	531	2123	-	4987 25	3643	7004 94	1261 37	279 64	66 66	14088 17
1851.													
January,	1673	302	2469	591	2109	-	5791 42	4055	7808 28	1261 38	272 66	66 67	15752 79
February,	1705	659	2686	340	1156	-	5989 61	3776	7711 49	1261 37	261 15	66 67	15945 80
March,	761	770	2445	646	2512	-	7457 53	4093	8178 40	1261 38	398 70	66 66	18331 93
April,	849	769	1547	81	2770	-	9072 27	2829	5442 08	1261 37	270 68	66 67	17142 49
May,	416	1122	711	79	2605	-	6597 10	2947	5629 25	1261 38	225 74	66 67	14707 88
June,	65	1453	598	48	2392	-	7096 73	2906	5642 55	1261 37	301 79	66 66	15368 28
July,	193	1005	3186	230	2170	-	6101 38	3463	7286 69	1261 38	345 52	66 67	15847 99
August,	142	996	9694	20	3429	-	6377 10	4004	7961 29	1261 37	320 63	66 67	16821 92
September	215	383	7611	5	2594	-	7648 48	5119	9706 51	1261 38	498 86	66 66	19976 69
	12893	7959	56013	2995	31875	30904	82724 97	44623	87569 50	15136 50	3808 91	800 00	199468 86
	7020	11797	119113	12969	42139	32189	85166 73	43633	86033 80	15200 00	3685 56	500 00	201996 20
For last year,											123 35	-	
Increase,	5873	-	-	-	-	-	-	990	1535 70	-	-	-	2527 34
Decrease,	-	3838	63100	9974	10264	1285	2441 76	-	-	1678 29	-	-	

## SOUTHSIDE RAILROAD COMPANY.

OFFICE OF THE SOUTHSIDE RAILROAD COMPANY,  
Petersburg, Nov. 15, 1851.

*To the President and Directors Board of P. Works, Richmond.*

GENTLEMEN,

I have the pleasure to send you the proceedings of the stockholders of the Southside railroad company, had at their annual meeting on the 12th instant, together with my own and the chief engineer's reports.

I send also two statements of the affairs of the company, made by our clerk and treasurer—the one up to the 30th September last, inclusive, in obedience to the requirements of your board, the other made for the stockholders up to the 31st October last.

These documents are more in detail than those usually submitted to the Board of public works, but will not therefore, I presume, be the less acceptable.

The letting of a portion of our road, which occurred in Farmville on the 15th and 16th ult., and the preparation necessary to be made for the meeting of the stockholders on the 12th instant is my apology for not sending these documents at an earlier day. I trust the delay will cause inconvenience to no one.

I am, with high respect, your obedient servant,

WM. PANNILL, *President.*

At the annual meeting of the stockholders of the Southside railroad Company, held in the city of Petersburg on Wednesday the 12th day of November 1851 :

On motion of Francis E. Rives, Esq., Richard K. Meade, Esq. was called to the chair, and Stephen D. Watkins, the clerk of the Company, in pursuance of the 2d article of the by-laws, attended as Clerk.

On motion, the chair appointed Messrs. Thomas S. Gholson and Joseph E. Cox a committee to examine such powers as might have been given by any of the stockholders to represent them in the meeting, who reported that the proxies presented were all in proper and legal form, except the following, viz : Power from John F. May to Jno. Lyons, from J. Womack to J. R. Rice, from J. Lilly to Uriah Wells, from N. B. Long to Uriah Wells, from William F. Joynes to Francis E. Rives, and from L. B. Lyons to William Frayne.

On motion of Francis E. Rives, the 4th article of the by-laws was suspended, and the above-mentioned proxies were proved by wit-

nesses, and the meeting decided that the proxies might give a vote as such, and also all others which might be so proved.

It being ascertained that a majority of the whole stock was represented in this meeting:

The president's report was presented and read, with the accompanying documents therein referred to; which were, on motion, received and ordered to be recorded.

On motion, Messrs. Andrew Kevan, Lewis Lunsford and D. M. Bernard were appointed a committee to examine the president's report, with the accompanying documents, the clerk and treasurer's books, and have the said report, with the accompanying documents, the charter and by-laws of the company, together with all laws in relation to the Southside railroad, printed.

On motion of Francis E. Rives, it was resolved that the following article be added to the by-laws, viz:

ART. 17.—There shall be appointed at each annual meeting of the stockholders a committee of five, a majority of whom may act, whose duty it shall be to ascertain the condition of the several improvements connected with this road, and enquiring into the management of the same, and the manner in which the books and financial affairs are kept; and making it the duty of such committee to report to the said meetings the result of such examination and enquiry, and to recommend such measures as in their opinion will tend to promote the permanence, value and usefulness of the respective works, a reduction of excessive charges, and prohibition of all unnecessary expenses, and an economical, systematic and efficient organization of the superintendence and management of the same. And if the stockholders shall at any annual meeting fail to appoint such committee, the duties aforesaid shall be performed by the committee of the preceding year.

In pursuance of article 17th, the chair appointed Francis E. Rives, Edwin James, George W. Bolling, D'Arcy Paul and Lemuel Peebles a committee to discharge the duties required by said article.

On motion of Col. George W. Bolling,

*Resolved*, That the president and directors of the Southside railroad company be and they are hereby instructed to make application to the next legislature of Virginia for an increase of the capital stock of said company to two millions of dollars, and that the state subscribe three-fifths of said increase; also for an act to change the name of the Southside railroad company, so that in future the said company shall be entitled "The Petersburg and Lynchburg Railroad Company."

On motion, it was

*Resolved*, That the annual meeting of the stockholders of the company be hereafter held on the 3d Wednesday in October of each year, instead of the 2d Wednesday in November, and that the fiscal year of the company shall terminate on the 30th of September of each year, instead of the 31st of October.

On motion, William Pannill, Esq. was unanimously elected president of the company; and the ballot being taken, Jos. E. Venable,



Peter B. Wills and Samuel V. Watkins were elected directors on the part of the stockholders.

On motion, Samuel V. Watkins was unanimously elected vice president of the company.

The meeting was officially informed that Dr. Joseph E. Cox and John Johns had been appointed directors on the part of the state of Virginia in this company, and that William C. Flournoy, Esq. was the state's proxy, and Francis E. Rives alternate.

And on motion, the meeting adjourned.

R. K MEADE, *Chairman.*

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OFFICE OF THE SOUTHSIDE RAILROAD CO.  
*Petersburg, Nov. 12th, 1851.*

*To the Stockholders of the Southside Railroad Co.*

GENTLEMEN,

I have the honor to present the second annual report of the directors of your company.

At your last meeting the grading, masonry, &c. of the eastern portion of the road from Petersburg to the Junction of the Richmond and Danville road, a distance of 52½ miles, was under contract, and a great part of it completed. Surveys were then in progress for extending the road. A final location was made from the Junction to Farmville, and the grading and masonry let to contractors on the 17th day of December 1850, to be completed by contract May 1st, 1852, which (judging from the present state of the work) we think will be done.

The bridge over the Appomattox river below Farmville was let in August last—the masonry to Messrs. Flournoy and McDearmon and the superstructure to Mr. F. Carr, to be completed October 1st, 1852. From the known energy of the contractors, we have every reason to expect a fulfillment of their engagements. If we be not disappointed in these contracts we may reasonably expect to have our road in operation to Farmville by the 1st December 1852.

In our last report it will be seen that iron had been purchased to lay the road to the Junction of the Richmond and Danville road, and that nearly all of it had been received. The balance has since come to hand excepting a few tons, which will be received by the time it is needed. Since that time we have contracted with the same party, to wit: James Dunlop, agent for Curtwell, Allin & Co., of the Carrn Kelyn and Blama iron works in Wales, for 1,500 tons of rails of the same weight and pattern as that before purchased, at \$41 per ton of 2240 lbs., cash on delivery at City Point—one half to be delivered on or about the 1st of April, and the other on or about the 1st of May, 1852. The rails are to be notched by the makers to fit the chairs we are now using.

We have also contracted with the same concern for wrought iron

chairs to be furnished and fitted to the rail according to a pattern furnished, at 3 cents per pound, which is  $\frac{3}{4}$  of a cent less than we are now paying. This lot of iron will lay the road to Farmville.

On the 15th October a letting was made in Farmville, of the grading, masonry and bridging of about 30 miles of the road, commencing a little below, and extending through and west of that town, to a point within 23 miles of Lynchburg.

This division is to be completed in all next year, (1852.) The prices at which the work was taken are considered fair.

In June last, the superstructure or laying the track was let to Col. David Jones, who shortly thereafter commenced the work, and has progressed about 28 miles, with every prospect of reaching Blacks and Whites by January 1st, and the Junction by the middle of March 1852.

It is believed by that time the grading on the division of the road from the Junction to the bridge will be so far completed as not to impede the laying of the track to that point.

We have purchased from our enterprising citizen Uriah Wells two locomotive engines, which were made in his shop here, at prices not exceeding those we should have had to pay elsewhere. We believe the engines to be equal if not superior to any made at the North. One of them has been employed for some months in carrying materials up the road for the track layers, and has performed remarkably well: the other has but lately been put upon the road and is intended for the passenger and freight train.

We have had made in Springfield two passenger cars, which, for elegance, comfort and durability, will compare, we think, with any now in use in Virginia.

We have also had made here (in part) a second class passenger car which is now on the road. It is the intention of the board to commence within the next eight or ten days to run regularly a passenger and freight train to Wilson's depot, a distance of 30 miles.

It is believed that our present capital of \$1,400,000 will complete all the work we have undertaken, but that it will be inadequate to construct the road to Lynchburg. It has never been thought that that sum would be sufficient to build a road 120 miles in length, laid with heavy rail, and stock it with engines, cars, &c.; especially too, when it is known that the western division of the road, from the Junction to Lynchburg, passes through a rough and rocky country.

To enable us, then, to carry out the great scheme of connecting with the Virginia and Tennessee railroad at Lynchburg, and consequently with the Mississippi river at Memphis, your board would respectfully recommend that an application be made to the next legislature for an increase of the capital stock of the company to two millions of dollars, and that the state take three-fifths of said increase. This would leave \$240,000 to be raised by private subscription, which, with proper efforts, we think will be accomplished. It is believed that this amount or less will enable us to accomplish the object we seek to attain.

Your board would further recommend that application be made to

the legislature to change the name of your road from Southside to Petersburg and Lynchburg, because the former title indicates the locality, while the latter clearly shews the points of its connection.

We are required by the Board of public works to render them a statement of the affairs of our company up to the 1st of October of each year. Our fiscal year terminates on the 31st of October—one month after theirs. In order that one statement and report may answer for both, your board would recommend a change of our annual meeting to the second Wednesday in October, and that our fiscal year terminate on the 30th September. This would save the officers of the company much labor, and their time is likely to be fully occupied.

At our last annual meeting the state was not represented, owning at that time no stock in the road. By an act passed at the last session of the legislature the Board of public works was directed to subscribe, on behalf of the state, three-fifths of \$800,000, which was promptly done—consequently, at this meeting, the Board of public works has the right to appoint two directors on the part of the state; and it has accordingly appointed Dr. Jos. E. Cox of Petersburg and Col. John Johns of Appomattox county, leaving three to be elected by the individual stockholders.

When we consider that the first contracts for the grading of our road were made about the beginning of last year, and that the commencement of the work was not until the 1st of March 1850, we think we have cause to congratulate you on the rapid progress which has been made, and to trust that the same vigorous efforts may be continued to its completion. For this success your board is mainly indebted to the prompt and cheerful manner in which the stockholders have met the requisitions made upon them.

The amount of stock subscribed, up to the 1st instant, is as follows, viz :

By the corporation of Petersburg,	-	-	-	623,500	00
“ “ Farmville,	-	-	-	20,000	00
By individuals,	-	-	-	250,500	00
By the Board of public works on behalf of the state,				480,000	00
Making together,					<u>\$1,374,000 00</u>

Your board is also informed that there are subscriptions amounting to about \$10,000, which were made on condition that the road should pass through Prince Edward, Charlotte and Appomattox counties, on the south side of Appomattox river above Farmville. While these subscriptions are binding on the parties, they have not yet been officially reported by the commissioners so as to enable us to place them on the books of the company.

From this it will be seen that only \$16,000 remain to be subscribed to complete the capital stock of the company; and as some of the contractors have agreed to take 2½ and 5 per cent. of their work in the stock of the company, we may consider the capital of \$1,400,000 nearly complete.

The original subscription of \$ 437,600, reported to the last meeting of the stockholders, has nearly all been paid in, and scrip issued to the stockholders.

Of the last subscription 30 per cent. has been called in, in requisitions of from \$ 2 and \$10 per share.

The large force now and hereafter to be employed on the works, will make it necessary to call in from \$5 and \$10 per share per month for several months to come, it being the determination of the board to press the work forward with all possible despatch.

For information connected with the engineer department, I beg reference to the report of our chief engineer, C. O. Sanford, Esq. herewith, marked A.

I submit the clerk and treasurer's report, marked B, shewing the receipts and disbursements of the company to the 31st ult., inclusive:

Receipts,	-	-	-	-	-	-	673,643 70
Disbursements,	-	-	-	-	-	-	639,335 76
							<hr/>
Balance cash on hand,					-	-	34,307 94
Due by stockholders,	-				-	-	699,739 26
							<hr/>
Leaving a balance for the further prosecution of the							
work, of	-	-	-	-	-	-	<u>\$734,047 20</u>

We deem it unnecessary to enter into a detail of the many advantages and the cheering prospects of large profits to be derived from the great work in which we are engaged. You are all aware of them, and we trust your most sanguine expectations may ere long be fully realized.

In conclusion, we beg leave to return our thanks for the high honor you have conferred upon us.

Our best efforts have been used to discharge faithfully the trust reposed in us, and we invite a full and free investigation of our proceedings for the past year, with the hope that they will meet your approbation.

All which is most respectfully submitted.

WM. PANNILL, *Pres't.*

[ A.]

PETERSBURG, November 8th, 1851.

*To the President and Directors of the Southside Railroad Co.*

GENTLEMEN,

The time has again arrived to make a report upon the progress of the Southside railroad ; and I respectfully submit the following statements, arranged nearly in the order in which the separate divisions were placed under contract or located :

*First Division—from Petersburg to the Junction of the Richmond and Danville Railroad—52½ miles.*

The grading and masonry for nearly the whole of this division was contracted for in December 1849 and January 1850. The work is completed, with the exception of \$1,600 worth of grading at a point 35 miles from Petersburg, and \$800 worth at the western end of the division. The whole, however, can be completed before the laying of the track can reach these portions of the grading. The track is now laid for about 25 miles from Petersburg, and the contractor is confident that he will complete his contract of the first 40 miles by the end of this year, and that the remaining 12½ miles can be finished early in March. This will depend much upon the weather during this winter ; but it is probable, that taking everything into account, a mile can be laid in 4 days from this time forward, and hence, that the 27 miles yet remaining to be done would require 108 days, which would bring the time to the early part of March next.

The town and country depots, water stations and other buildings on this division are progressing, and will be in a sufficient state of forwardness for use before any large amount of business will be transacted upon the road.

*Second Division—from the Junction to near Farmville—14½ miles.*

The grading of this division was placed under contract on the 17th of December 1850. The contractors are employed upon this with a force sufficient to execute \$1,000 worth of work per day ; and as the probable amount of work remaining to be done is estimated at \$140,000, the whole can be finished in time to extend the track to Farmville during the ensuing year.

The Appomattox bridge is upon this division, and within 4½ miles of Farmville. The piers of this were contracted for August 19th, 1851, and the superstructure August 4th, 1851, to be completed October 1st, 1852.

The contractors are now actively engaged in making their arrangements, quarrying rock, &c. ; and from the known responsibility of all, it is confidently expected that no delay will occur at this point.

*From Farmville Westward—30 miles.*

Work on this division was effected October 15, 1851—the grading, bridging, &c., &c., to be all completed in the year 1852; and as it has been divided into sixteen different contracts to highly respectable and experienced men, it is to be hoped that the laying of the track may be successfully and uninterruptedly prosecuted until it reaches the western terminus.

*From Lynchburg—extending from Lynchburg—23 miles in length.*

In this portion no contracts have been made.

There have been two lines surveyed: one passing down Beaver creek to James river, and along the tow-path of the James river to the mouth, the other passing down Archer's creek to its mouth, crossing James river, and extending along the northern shore to near Lynchburg, then recrossing the river to join the Virginia and Tennessee railroad.

The party engaged upon this division has recently returned to Petersburg, and although the profiles shew that the northern route is preferable, the subject will yet require further investigation before it would be prudent to decide upon the route. This could be made and the work placed under contract during the present year, if the board deems it advisable.

The whole length of the line will be about 120 miles.

It has been known to the board for some time that the present capital of the company (\$1,400,000) would not be sufficient to construct the road to Lynchburg; and the questions arise, How much additional capital is required? and, How far the road can be extended with the present capital? And in order to answer these questions I have caused approximate estimates to be made; and while these estimates are based on figures calculated for each 100 feet distance of the line, I cannot pretend to be accurate, owing to many causes, among which may be mentioned the fluctuations in the prices of labor and provisions, and the fact that many of the excavations contain rock and slate covered with earth, and very irregular in their formation.

I believe that the cost of construction of the whole road complete will be about \$2,000,000, and the cost of engines, cars and other vehicles used for transportation will at first be about \$100,000 in addition, and this sum must increase as the business of the road increases. But as this increased cost of additional trains may be met by the surplus income, or if deemed best by borrowing money at six per cent., when I think it must be evident to all who have examined our road and its connections that it must pay dividends of more than six per cent., I respectfully recommend that the capital stock be increased to \$2,000,000, being an increase of \$600,000. This no doubt would be granted by the legislature, and it is to be hoped that the same appropriation of three-fifths of this will also be made by the state, leaving \$240,000 to be raised otherwise; and I feel quite confident this will be made up.

The present capital is sufficient for all the contracts made up to the present time and allow of further contracts for laying the track to some point between the Junction and Farmville, these contracts can be made from time to time without delaying the work.

The following statements shew the number of engineers, agents, &c.:

C. O. Sanford,	chief engineer,	-	\$ 3,000	per annum.
F. Wright,	assistant engineer,	-	1,500	"
F. K. Marcel,	"	-	1,200	"
J. H. Shearer,	"	-	1,200	"
W. E. Randolph,	"	-	1,200	"
J. R. Mosse,	"	-	1,200	"
B. H. Gordon,	"	-	1,200	"
E. J. Wall,	"	-	1,200	"
E. A. Blanch,	"	-	1,000	"
H. Bardwell,	leveler,	-	900	"
L. Mariani,	"	-	500	"
R. E. Rodes,	assistant engineer,	-	1,200	"
B. Ross,	leveler,	-	500	"
W. Bolling,	rodman,	-	180	"
Twenty-five negroes for axemen, chainmen, &c.				

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*List of Agents, Hands, &c.*

G. B. Allsop,	agent at Petersburg,	-	\$ 840	per annum.
G. W. West,	do. of repairs,	-	750	"
Jos. Wilson,	do. on train,	-	470	"
B. F. Childrey,	do. do.	-	300	"
Two enginemen, each	-	-	600	"
Forty hands on road, train and at depot.				

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*List of Engines, &c.*

2 locomotive engines.				
12 eight wheeled freight cars.				
7 four	"	dumping cars.		
5 four	"	hand cars.		
1 four	"	buggy car.		
2 eight	"	1st class passenger cars.		
1 eight	"	2d " " "		

Force employed on contracts between Petersburg and Farmville—  
1,500 laborers and 400 horses.

Respectfully submitted.

C. O. SANFORD,  
Chief Engineer.



PETERSBURG, November 13th, 1851.

GENTLEMEN,

At a meeting of your board yesterday, you desired that I should make statements to shew the comparative cost of the Southside railroad with other roads in the United States, the comparative advantage of its grades, and the probable income of the road; and although the time allowed has not been sufficient to collect and condense the facts in the manner I could wish, I respectfully offer the following facts, compiled from reports as far back as 1846, of such lines as have been commenced from Atlantic cities, and extended with a view to draw in Western trade and travel. This, it seemed to me, would be the most fair and satisfactory comparison, as our road is designed for the same object.

*The Comparative Cost per Mile.*

1st. Taking the chain of railroads extending from Boston to Rochester upon the line to Buffalo, a distance of 455 miles, the average cost per mile is \$44,000.

2d. From Philadelphia through Reading, to the coal regions of Pennsylvania—93 miles—cost \$100,000 per mile.

3d. Baltimore and Ohio railroad, the portion from Baltimore to Cumberland—178 miles—cost per mile \$43,000.

4th. From Charleston, S. C. to Atlanta, Georgia—355 miles—cost per mile \$25,000.

The New York and Erie road and the great Central road through Pennsylvania have not been in operation a sufficient length of time to enter into the comparison.

It is proper to state that the three first roads are principally laid with double tracks; nevertheless, our road will compare favorably, as the cost of construction will be, say \$17,000 per mile, and the furniture of the road even for years hence cannot exceed \$3,000 per mile, making together \$20,000 per mile.

*On the Advantage of Light Grades.*

From a table which has been carefully made up, it appears that taking the same weight of goods for each train, the proportional number of engines for grades would be as follows: Assuming one engine for a level grade, it would take two engines for a grade of 17 feet per mile, 3 engines for 37 feet to the mile, 4 engines at 52 feet per mile, 5 engines at 68 feet per mile, and 6 engines at 85 feet grade per mile.

Every train upon our road may be loaded at Lynchburg for 16 feet grades, and the whole landed at Petersburg in 12 hours. The return trains will encounter grades of 35 feet, but the loads, chiefly of dry goods and groceries, will not be more than  $\frac{1}{3}$  or  $\frac{1}{2}$  of the Western products; hence the annual expenses must be light in comparison with nearly every road of any length in the United States, as, with but one or two exceptions, they are graded at from 30 to 80 feet per mile. To



give a practical illustration of the effects of grades, I have taken for examples the Philadelphia and Reading road with light grades, and the Western road through Massachusetts of heavy grades; and I find that the first costs but 43 cents per mile for every mile run by trains, while the latter costs 85 cents, or about double. The advantage, in fact, is much greater than this, as the trains on the first mentioned road average a much greater length, and consequently greater wear and tear proportionally than upon the latter road.

*Probable Income.*

The nett income of the four roads heretofore mentioned that were parallel with ours, is per mile respectively, \$3,400, \$11,100, \$3,400 and \$1,900. We may fairly infer from the above facts that our road will yield \$2,000 nett income, being \$240,000 for the whole road, and 10 per cent. nett income upon a capital of \$2,400,000; and I do not think it extravagant to suppose that \$2,500 per mile nett income may be realized, yielding 12½ per cent. on the same sum. When it is certain from surveys made, that no other road from an Atlantic city to the West can be made with 16 feet grades against the heavy trade at any reasonable expenditure, certainly none in Virginia can compete with it in this respect. This road, too, strikes at Lynchburg, which must become in time the point through which the immense trade and travel from the West and Southwest will pass; and this road offers by far the shortest route to deep water of any other that has or can be projected. Trade will take the shortest route, and capital will be prepared to meet it. This has always been the result.

It may not be amiss, in conclusion, to remind you that an important trade was once carried on between Baltimore and Eastern Tennessee, by wagons passing through the Valley of Virginia; that this trade has taken other and improved routes, and chiefly through the railroads of South Carolina and Georgia; that now the product of the Valley of Virginia, or at any rate the Southwestern portion, is principally cattle, which are driven to Baltimore through the Valley, merely for want of facilities to get other and more profitable products to market—this, too, when it is known that the whole Valley is of the same rich limestone land that extends through the most fertile portions of Pennsylvania and New York, while the mineral wealth cannot be exceeded by any state in the Union. Inexhaustible beds of plaster, lime, salt, coal, iron and lead lie almost worthless for want of a cheap means of conveyance.

Heretofore no improvement has passed the Blue Ridge and has gone into practical operation to develop these vast resources; but now a great system, of which our road is an important part, has been planned, with every prospect of being carried out, to make Virginia what she should be—one of the first commercial states in the Union; and this system is the only means she could adopt to effect it.

Very respectfully,

C. O. SANFORD,  
*Chief Engineer.*

## [ B. ]

*Statement of the Affairs of the Southside Railroad Company from the 31st October 1850, to the 31st October 1851.*

Capital stock \$1,374,000 :			
Subscribed by the town of Farmville,	200 shares,	-	20,000 00
Do. by individuals,	2505 "	-	250,500 00
Do. the city of Petersburg,	6235 "	-	623,500 00
Do. the state of Virginia,	4800 "	-	480,000 00
			<u>1,374,000 00</u>
Whole number of shares,	<u>13740</u>		
Amount already paid in,	-	-	674,260 74
Do. due by individuals,	-	183,148 67	
Do. due by city of Petersburg,	-	164,109 09	
Do. due by town of Farmville,	-	16,000 00	
Do. due by state of Virginia,	-	336,481 50	
		<u>699,739 26</u>	
			<u>\$1,374,000 00</u>
To cash on hand, per last year's report, including \$2000 in C. O. Sanford's hands,	-	-	48,388 48*
To cash received for requisitions called for and paid during the fiscal year,	-	-	413,292 28
To cash received for rents,	-	-	481 52
To cash received from sale wooden houses from depot lot,	-	-	265 21
			<u>462,427 49</u>
Disbursements:			
Paid for masonry account,	-	-	15,952 58
grading,	-	-	240,565 97
engines, cars, &c.	-	-	18,897 72
land damages,	-	-	11,668 46
real estate, depot lots, &c.	-	-	18,958 81
engineering expenses,	-	-	17,672 71
general management,	-	-	524 16
bills payable, houses bought of Col. Bragg,	-	-	
and for negro hire,	-	3,374 38	
duty bonds for iron,	-	20,258 82	
		<u>23,633 20</u>	
negro hire, laborers, &c.	-	-	1,369 56
superstructure,	-	-	10,843 37
iron account, including interest paid J. Dunlop,	-	-	34,953 55
salary account,	-	-	2,787 50
office rents and other charges,	-	-	541 08
on account of depots,	-	-	2,874 94
on account of bridges, &c.	-	-	10,778 91
on account of railroad sills,	-	-	16,097 43
By balance on hand,	-	-	34,307 54
Error, supposed to be in addition,	-	-	45
			<u>\$462,427 94</u>
			<u>462,427 94</u>
Balance on hand,	-	-	<u>\$34,307 54</u>

\*This balance should be reduced \$2,000, that amount being in Mr. C. O. Sanford's hands, and was charged to him on the books, say

Less amount in C. O. Sanford's hands,	-	-	48,388 48
			<u>2,000 00</u>
			<u>\$46,388 48</u>

**Whole amount:**

Received from stockholders from the commencement,	-	-	672,767 68
Do. for rents and sale of houses,	-	-	746 73
Do. interest, per last report,	-	-	129 29
			<u>\$ 673,643 70</u>

**Disbursed:**

For grading, masonry, iron rails, engineering, land damages, salaries of officers, &c.	-	-	639,335 76
Balance in treasurer's hands,	-	-	<u>\$ 34,307 94</u>

S. D. WATKINS,  
*Clerk and Treasurer.*

*Return of the state of the Southside Railroad Company for the whole time, from the commencement in 1849 to the 30th September 1851.*

Capital stock \$1,345,800 00:				
Subscribed by Individuals,	2423 shares,		242,300 00	
the city of Petersburg,	6235 "		623,500 00	
the state of Virginia,	4800 "		480,000 00	
				1,345,800 00
Amount of individual subscription unpaid,	-		195,114 00	
City of Petersburg	" -		184,109 09	
State of Virginia	" -		366,481 50	
			745,704 59	
Paid on account of land damages,	-	24,717 57		
" real estate, for depots, &c.		19,634 30		
" iron, rails and charges,		173,713 26		
" engineer'g—to engineer's				
instruments, &c.	-	34,424 57		
" engines, cars, coaches, de-				
pot houses as far as pur-				
chased and paid for,		16,719 62		
General management, includ'g the president's				
and clerk's salaries, office charges, &c.		6,190 80		
Grading, masonry, bridges, culverts and ad-				
vances made to contractors on account of				
work in progress,	-	291,088 61		
Spikes, chains, railroad sills, and to contrac-				
tors for laying the iron, &c.	-	28,811 97		
Interest over and above receipts, which was				
on account of first cargo of iron held back				
as colateral security,	-	429 87		
			595,630 57	
Cash on hand,	-		4,464 84	
			\$1,345,800 00	1,345,800 00

S. D. WATKINS,  
Clerk and Treasurer.

A List of Directors, Clerks, Engineers, Depot and other Agents on the Southside Railroad, 1st October 1851.

NAMES.			Salaries.	
William Pannill, President,	-	-	\$ 2000 00	
Edwin G. Booth,	} Directors,	-	Mileage,	10 cents per mile.
John W. Gilliam,				
Lemuel Peebles,				
Sam'l V. Watkins,				
Peter B. Wills,				
S. D. Watkins, clerk and treasurer,	-	-	900 00	
Engineers.				
C. O. Sanford, chief engineer,	-	-	3000 00	
F. Wright, assistant,	-	-	1500 00	
F. R. Marcel, "	-	-	1200 00	
W. E. Randolph, "	-	-	1200 00	
J. H. Shearer, "	-	-	1200 00	
J. R. Mosse, "	-	-	1200 00	
B. H. Gordon, "	-	-	1200 00	
E. G. Wall, "	-	-	1200 00	
R. E. Rodes, "	-	-	1200 00	
E. A. Blanch, "	-	-	900 00	
H. Bardwell, "	-	-	900 00	
L. Mariani, leveler,	-	-	500 00	
B. Rosse, "	-	-	500 00	
W. Bolling, rodman,	-	-	180 00	
G. W. West, superintendent of repairs,	-	-	750 00	
G. Allsop, agent at Petersburg,	-	-	840 00	
Joseph Wilson, agent on train,	-	-	470 00	
B. F. Childrey, " "	-	-	300 00	
Two engine men,	-	-	600 00	
Forty hands on road, train, at the depot, &c.				

S. D. WATKINS, Clerk.

## VIRGINIA CENTRAL RAILROAD COMPANY.

OFFICE V. A. CENTRAL RAILROAD CO.  
Richmond, 18th Nov. 1851.

JAMES BROWN, JR.  
*Second Auditor.*

DEAR SIR,

I herewith enclose you a copy of the report of the president and directors of the Virginia Central railroad company, made to the annual meeting of the stockholders on the 31st of October. This report contains a return of the state of the company and all the other tables and statements required by law.

Very respectfully,

E. FONTAINE, *Pres't.*

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*Sixteenth Annual Report of the President and Directors of the Virginia Central Railroad Company to the Stockholders, at their Annual Meeting on the 31st October 1851.*

LOUISA COURTHOUSE, Oct. 31, 1851.

This being the day appointed for the annual meeting of the stockholders of the Virginia Central railroad company :

William T. Early was elected chairman, and John Garrett and Charles Thompson were elected secretaries.

The whole number of votes which could be given is 4,900, a large majority of which were ascertained to be present, either in person or by proxy. The president then presented the following report on behalf of the board of directors :

REPORT.

The completion of the road commonly called the eastern extension, from the Junction to Richmond, which has been effected since the last annual meeting, and its effects on the revenues of the company, are subjects of congratulation to the stockholders. Whatever distrust existed in the minds of some as to the wisdom of the policy which suggested the undertaking, your board thinks must now be entirely removed. The apprehension of encountering serious pecuniary difficulties was not without foundation, as the subscription only amounted to about \$38,000. These difficulties were felt by the board, but they were met with energy, sustained by a confidence of success, and have been overcome, and the road has now been in operation nine months, with results on the interest of the company so encouraging

that none can now hesitate to regard it as a most fortunate event in its history, that the eastern extension was undertaken.

The receipts since the first of January 1851, are \$117,703 63, whilst those of the same period for the preceding year were only \$69,306 68, being an increase of \$48,396 95 in nine months. The receipts would have been greater; but the increased freight, which could have been obtained on opening the road, was more than was expected, and more than the company was prepared to accommodate. Supposing the fourth quarter of the present calendar year to be equal to the average of the three first, the receipts of the first twelve months after opening the road to Richmond, will be \$156,937 17. The receipts for transportation for the year ending 30th September 1850, were \$91,078 83, and the receipts for transportation for the year ending 30th September 1851 were \$143,801 64 cents, being an increase of \$52,722 81.

*Disposal of the Nett Profits of the Company which accrued since the last Dividend.*

The stockholders are aware that a large amount of the receipts of the company for the last two years has been applied to the construction of this extension of the road to Richmond, embracing the purchase of ground and erection of buildings. The nett profits having been thus disposed of, no dividends have been during that time paid to the stockholders; but in conformity with the previous practice of the company, and under the authority of the last annual meeting, the scrip of the company has been issued, payable, on the first day of October 1866, to those stockholders from whose subscriptions the amount thus appropriated was realized, equal to 12 per cent. on the capital employed. The capital considered as employed comprises the various stocks held under the acts of 1836, '38 and '47, amounting to \$664,000. No part of the receipts since the road was opened to Richmond has been embraced in the scrip dividend above mentioned. As the policy of the company in constructing and equipping the road from the Junction to Richmond has diverted so large an amount of the receipts from immediate distribution in the form of dividends among the stockholders, it is proper to enquire what amount of surplus would have been on hand if the gross receipts had only been applied to the regular expenses of administering the road, without appropriating them to construction of a new road and furnishing it with motive power. For the purpose of illustrating this point and at the same time seeing the result of operating the extension from the Junction to Richmond up to the present time, we will refer to the statements of the treasurer for the last twelve months, including one quarter before the road was opened to Richmond.

*Profits for Twelve Months, viz: from October 1st, 1850, to October 1st, 1851.*

The amount of capital, which will be considered as employed, will be the cost of the eastern extension and the amount of stock held un-

der the three acts of 1836, '38 and the act of 1847, for extending the road from Gordonsville to the Blue Ridge. It must be remembered, however, that a considerable sum of the proceeds of the last act is expended west of Charlottesville, producing no revenue, as the road is only completed to the town.

Amount of stock held under the three acts above mentioned, - - - - -	664,000 00
Cost of eastern extension, including large purchases of ground and erection of buildings, - -	332,087 35
	<hr/>
Whole capital supposed to be employed, -	<u>\$ 996,087 35</u>
Gross receipts for the year, from October 1st, 1850, to October 1st, 1851, (see statement B,) -	143,801 64
Deduct expenses of transportation, viz: salaries, repairs of road, a large stock of materials for future repairs, repairs of cars and engines, and materials on hand. Depot expenses, miscellaneous expenses, (see statement B,) - - - - -	78,814 78
	<hr/>
Leaving a nett balance of this sum, which, excepting the balance of cash on hand, has been applied to construction of new road, furnishing the same with motive power, &c. &c. - - - - -	<u>\$ 64,986 86</u>

This sum of \$ 64,986 86 is nearly 7 per cent. on the whole capital set down above as invested, although a considerable amount, viz: that expended west of Charlottesville, and in the purchase of ground in Richmond, not now used, has not been in any sense productive. The expenses of transportation, as stated in statement B, are also swelled beyond their proper amount, by charging to repairs of road a large lot of iron on hand just purchased, and a good deal of work between the Junction and Richmond, since the road was opened, which should have been done previously and estimated in the cost of construction, and would have been but for the impatience of the company and the public to get the road opened. But making no allowance for these items, the result is highly satisfactory.

#### *State of the Work West of Charlottesville.*

The whole line to the town of Staunton is under contract, and the work is progressing very well, being in the hands of an enterprising and reliable set of contractors. More than half of the graduation, including bridging and masonry, is now completed, and another section may be expected to be in operation before the winter sets in.

The stockholders are apprised that by the act of March 22d, 1851, which was accepted at the called meeting in April last, no iron of less weight than fifty pounds to the lineal yard is to be laid west of Charlottesville. Procuring the iron in conformity with this provision occa-



sioned some delay in laying down the superstructure from Charlottesville to Woodville, but it is now in the course of execution, and will certainly be done during the month of November.

*Progress of the Tunnel at Rockfish Gap.*

It will be interesting to the company to know that although the rock at the main tunnel at Rockfish gap is still quite hard, and the excavation consequently slow, yet the work is prosecuted with unabated energy and industry, by the relays of hands, each working eight hours in the twenty-four. The board are informed that the contractors are in fine spirits, being encouraged to believe, from the improved character of the rock, that the whole excavation may be completed in three years from this time. The hardness of the material in the tunnel has given rise to many speculations as to the period when the road may be expected to be in operation through it. So far from there being any foundation for these various discouraging surmises, some of which may originate in a spirit not altogether friendly to the enterprise, the hardness of the rock and compactness in its formation may not delay the ultimate completion of the work, as the usual arching with brick will probably be unnecessary, and thereby the time of constructing the arch saved. The ultimate cost will be reduced from the same cause, not only to the extent of the arch, but also the diminished size of the excavation where arching is dispensed with.

*Bringing the Road into use between Waynesborough and Staunton.*

The delay which must take place in the completion of the tunnel at Rockfish gap, owing to the nature and amount of the work, as stated in a former report, suggests the propriety of laying the rails between Waynesborough and Staunton, and resorting to a portage across the mountain during that time, to which all are believed to assent; and the only question to be settled is, at what point, in the progress of the road towards the tunnel, the work of transporting the iron across the mountains should be undertaken. Your board had hoped that the work which is to be executed under the direction of the Board of public works might be completed to a point near the tunnel on the east side, as soon as that in the hands of this company can be done; but there are some very serious difficulties in the mountain section, embracing the two smaller tunnels, which will probably delay the completion beyond the winter after the approaching one. Before the next meeting of the stockholders the road will have been completed at least as far as Mechum's river, and the whole grading from the western base of the mountain to Staunton. Shall we still continue to defer the use of this portion of the road? The public anxiety is very great to witness the arrival of a locomotive at Staunton. Your board not only believe that it will give new life to the whole enterprise of reaching the Ohio, but that the beneficial effects on the receipts of the company will be such as to justify transporting the iron from Mechum's river. At that point the flour from Augusta may be expected to meet the

cars, and it is believed by those well informed on the subject, that the iron may be carried over the mountain in back loads at a very moderate charge. This operation will thus secure a two-fold advantage—of bringing a large amount of freight to the road, and effecting a cheap transportation of the iron. In undertaking to transport the iron from Mechum's river or some other point, before the more steep portion of the mountain is encountered, thus postponing the laying down the superstructure along the declivitous sides of the mountain another winter, the heavy slides of earth and rock into the track will probably have ceased. The geological formations for several miles on the steeper parts of the mountain side are such that very dangerous obstructions might occur if the use of the track was prematurely commenced. The board therefore thinks that in view of the whole subject, the iron should be transported across the mountain from Mechum's river, (unless a nearer point can be attained,) with the purpose of laying the superstructure to Staunton, at the earliest practicable day during the next year, if possible, provided the cost of transportation over the mountain be not too great.

*Relaying the Road from Junction to Gordonsville with the U Rail.*

The great addition to the tonnage on the road which has already occurred, and the still greater which may be anticipated, from the extension of the road to Staunton, and the opening of the macadamized road from New Market in the county of Shenandoah, to Gordonsville, will render it expedient at a very early day, to lay the road from Gordonsville all the way to Richmond, with a rail at least as heavy as that required to be used west of Charlottesville. The many advantages of having a road laid with such a rail are so well known that it is not necessary to discuss the subject. The only enquiry is, At what time it should be commenced? Your board think they hazard nothing in expressing the opinion that the expenses of working the road would be diminished to the extent of the interest on the cost, if it was promptly done between the Junction and Gordonsville. There are many powerful considerations why the road from Gordonsville to Richmond should be put in the best condition at an early day. Suffice it to say, that it will enable the company the more successfully to withstand any competition to which it may be exposed throughout its whole line; to manage with more ease the increased tonnage which may be expected at Gordonsville, and to give more general satisfaction in the transportation of freight offered by all our patrons. The materials in the present superstructure may be made to reduce the cost of relaying the new track. Assuming then only a saving in the expenses equal to the interest on the cost, the company would realize a nett gain of the whole amount of increased business it would do in freight and passengers, which must be very considerable in both—on freight by the increased power of the locomotive on a stiffer and smoother track, and on passengers, by the inducements which increased expedition and comfort present to them. Your board, however, feel assured that in a period of years the saving in expense of

transportation as the tonnage increases, will be more than the interest on the cost. Believing that it must be done ultimately—and as the sooner we realize the benefits the better for the interests of the company—they recommend that authority be given to the board to sell the bonds of the company if necessary, on the best terms they can, and have the road between the Junction and Gordonsville laid with as little delay as possible, using a rail not less in weight than that about to be laid west of Charlottesville.

*Extension of the Road from Staunton Westward.*

At the called meeting of the stockholders in October last, the board was instructed to cause surveys between Staunton and Covington to be made, and to have so much of the work put under contract as there were funds in hand to complete. The present season has been occupied in making surveys to ascertain the best location, which the board hopes will be completed by the day on which the stockholders are called to assemble. Nothing has been lost by the delay which has taken place, as too much care cannot be exercised in selecting a route through such a country as this line will have to traverse.

By observing the proper caution in the outset the necessity of changing the line after the operation on the road commences will be avoided. Yielding to the natural anxiety which is usually felt by the public to get into operation a railroad about to be constructed, lines have sometimes been put under contract, and subsequently the discovery was made that another route ought to be adopted, inducing a change in the location, which would be called for, even at very great expense. A report from the chief engineer on this subject will be found in the Appendix, shewing that a line can be gotten of a most favorable character as to distance, cost, grades and curves, between Staunton and Covington. The surveys for a continuation of the road from Covington to the Ohio, which have been prosecuted under the direction of the Board of public works, your board are informed, are of the most satisfactory character, and develop a route which will challenge a comparison with any competing line.

*Condition of the Road and Supply of Materials on hand, and Stock of Motive Power.*

The condition of the road is very good, considering the amount of transportation which has been done on it and the character of the superstructure. On this subject reference is made to the report of the committee appointed to examine it, which will be found in the Appendix. It will be seen that they attended to that duty in the month of May, and again in the month of October. The supply of materials for keeping the road in repair is ample. When the U rail was purchased for the section now being laid above Charlottesville, the occasion being favorable for purchasing the flat rail on good terms, 300 tons were procured, nearly the whole of which is now on hand; and although it swells the amount charged to the account of transportation expenses for this year, it will render the purchase of any for the next year's repairs unnecessary.

Arrangements were made early in the year for a full supply of engines and cars, but the board has been greatly disappointed in obtaining them, owing to the very great demand for them throughout the United States. Three locomotives were ordered from three different shops, and promised in the month of August; of which, up to the date of this report, one only is received, and that late in the month of September; a second is now shipped and on its way from Philadelphia, and your board feel satisfied that in a short time they will have a very efficient stock of motive power, expecting two other locomotives before the end of the year, and making constant additions to the number of burthen cars.

A statement of the affairs of the company from the commencement, also of the receipts and expenditures for the last fiscal year, and sundry other tables and papers of interest, will be found in the Appendix.

The paper marked (C) is a comparative table of receipts for freight and passengers for 1850 and 1851, stated monthly.

By order, and on behalf of the board of directors.

E. FONTAINE, *President.*

*Office Virginia Central Railroad Company,  
Richmond, Oct. 17th, 1851.*

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After reading the report of the committee on the treasurer's accounts, (which will be found in the Appendix,) in which reference was made to the number of persons traveling free on the cars, Messrs. Wm. Crawford and John Woolfolk made some remarks disapproving of the course of the board on that subject.

Mr. W. M. Ambler moved to refer the matter to a committee; and after further remarks, the whole subject was laid on the table.

Gen. Wm. F. Gordon offered the following resolution, viz:

*Resolved*, That the salary of the president of the company shall be two thousand dollars per annum.

Mr. Woolfolk moved to amend the resolution, by striking out two thousand and inserting one thousand; which motion was rejected by a large majority.

The question recurring on Gen. Gordon's motion, it was adopted by a large majority.

On motion of Mr. Jas. W. Saunders, the per diem pay of the directors was increased to four dollars.

The meeting then proceeded to the election of officers for the ensuing year.

Gen. Gordon nominated Edmund Fontaine as president, who was re-elected without opposition.

Mr. A. B. Magruder nominated John H. Timberlake as a director on the part of the stockholders, who was also re-elected without opposition.

The following resolutions were then adopted by the meeting with great unanimity:

1. *Resolved*, That the president and directors be authorized to raise the sum of \$200,000 by the sale of the bonds of the company, for the

purpose of relaying the road from the Junction to Gordonsville with a rail of 51 lbs. to the yard, and that, if necessary, a lien may be given on the property of the company.

2. *Resolved*, That the board of directors be authorized to prepare to lay the superstructure of the road between Waynesborough and Staunton, and that when the road is completed to Mechum's river, they be authorized to have the iron transported across the mountains, if it can be done on moderate terms.

3. *Resolved*, That the funds now provided for the extension of the road west of Staunton may be applied altogether to the graduation of the road, including bridges, except so much as may be necessary to pay the engineering expenses and the right of way, relying on future subscriptions to complete and equip the road.

4. *Resolved*, That the engineer of the company be requested to have at least thirty-five miles of the line between Staunton and Covington located with as little delay as possible, so that it may be put under contract before the end of the year.

5. *Resolved*, That a committee be appointed to make an appeal to the city of Richmond to subscribe to the stock of the company for the prosecution of the work between Staunton and Covington.

Committee appointed under the foregoing resolution—Messrs. John M. Botts, Thos. W. Doswell, Bernard Peyton Lewis Webb, Wellington Goddin, Alex. Garrett and John Womble.

6. *Resolved*, That a committee be appointed to urge upon the legislature, at its next session, the importance of giving the necessary aid to complete the road to the Ohio river.

Committee—Messrs. Jas. Lyons, J. W. Saunders, Augustus A. Chapman, Horace L. Kent, Nicholas Kinney, Philip H. Jones, A. B. Magruder, Mann S. Valentine, John B. Baldwin, Wm. F. Gordon, Samuel Price, Thomas R. Price, Charles Thompson, Wm. M. Ambler, Thomas J. Deane, Wm. J. Pendleton, Hugh W. Sheffey.

The stockholders being entitled to two directors, and having only elected one:

Mr. John Wood nominated Mr. David Anderson, Jr. as a second director.

Mr. Stephenson, of Augusta, nominated Mr. Jefferson Kinney.

To determine this election, the roll of stockholders was called, each voting according to the ratio fixed by law. Much time being consumed by this proceeding, and a late hour of the evening having arrived, the vote was summed up by J. Garrett, secretary, and reported to be in favor of Mr. Kinney; and this result was announced by the presiding officer.

The standing committees to examine the road and the treasurer's accounts, were ordered to be appointed by the chairman, and a resolution was adopted requiring the next annual meeting of the company to be held in the city of Richmond.

On motion, the meeting then adjourned *sine die*.

(Signed,)

W. T. EARLY, *Chairman*.

J. GARRETT,  
CHAS. THOMPSON, } *Secretaries*.

*Note by J. Garrett, one of the Secretaries.*

After the adjournment of the meeting, J. Garrett, one of the secretaries, re-examined the polls which were kept of the election of a second director, and discovered that there was a mistake in the addition, all of which will more fully appear by the following papers, the original poll being still in his possession.

J. GARRETT.

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I do hereby certify, that on a careful revision of the original poll hereto annexed, of the votes cast of the election of a director on the part of the stockholders of the Virginia Central railroad company, at the general meeting thereof, on the 31st of October 1851, Jefferson Kinney of Staunton, and David Anderson, Jr. of Richmond, being the candidates in nomination, I have discovered since the adjournment of the said meeting, that Jefferson Kinney received twelve hundred and thirteen votes, and David Anderson, Jr. received twelve hundred and nineteen votes, by which it will be seen that David Anderson, Jr. received a majority of six votes.

Owing to an error in the addition of the votes for Mr. Anderson, his vote was announced as eleven hundred and twenty-nine, and Mr. Kinney declared to be duly elected—whereas it now appears from the true statement of the votes actually cast, that Mr. Anderson was elected by a majority of six votes.

I have deemed it my duty to make this statement for the information of all whom it may concern.

(Signed,)

J. GARRETT, *Secretary.*

*November 1st, 1851.*

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Having assisted Mr. Garrett in taking the vote referred to above, I have, since the adjournment, at his request, aided by Mr. J. J. A. Trotter, of Augusta, carefully examined the additions on the original poll hereto annexed, made by Mr. Garrett, and hereby certify to the accuracy of the above statement.

(Signed,)

A. B. MAGRUDER.

*November 1st, 1851.*



## APPENDIX.

*Return of the state of the Virginia Central Railroad Company for the year ending the 30th September 1851.*

<b>Capital stock :</b>		
Subscribed by the commonwealth under the act of 1836 and 1838, 1,890 shares at \$ 100,	189,000 00	
Subscribed by the commonwealth under the act of 1847, 1,500 shares at \$ 100,	150,000 00	
Subscribed by the commonwealth under the act of 1849, 557 shares at \$ 100,	55,700 00	
Subscribed by the commonwealth under the act of 1850, 1,500 shares at \$ 100.	150,000 00	
Subscribed by the commonwealth under the act of 1851, 2,475 shares at \$ 100,	247,500 00	
	<hr/>	792,200 00
<b>Subscribed by individuals and counties, viz :</b>		
Subscribed by individuals under the act of 1836 and '38, 2,250 shares at \$ 100,	225,000 00	
Subscribed by individuals under the act of 1847, 1,000 shares at \$ 100,	100,000 00	
Subscribed by individuals under the act of 1848, 660 shares at \$ 100,	66,000 00	
Subscribed by individuals (240) and by Augusta county, (200,) act of 1849, 440 shares at \$ 100,	44,000 00	
Subscribed by Monroe and Greenbrier counties (each 500) act of 1850, 1,000 shares at \$100,	100,000 00	
	<hr/>	535,000 00
<b>Debts due by the company, viz :</b>		
Bonds guaranteed by the state, and payable in 1880,	100,000 00	
Bonds issued for loans authorized by the stockholders at their called meeting of April 1849 and March 1850, and at their annual meeting of 1850, and payable within four years,	61,382 75	
Bonds issued to contractors for work done between Junction and Richmond, and payable in 1859,	56,054 42	
Certificates of debt issued for dividends, and payable in 1852,	38,256 87	
Dividends due in cash and unpaid,	1,978 37	
	<hr/>	257,672 41
Received for premium and interest on guaranteed bonds,		1,197 75
Received for interest on unpaid requisitions on stock,		439 83
Received for rent of real estate,		227 50
Receipts for transportation from commencement,		622,572 54
Due by the company to individuals, per statement B, open accounts,	5,152 33	
Notes,	11,070 54	
	<hr/>	16,222 87
<b>Expended in the construction of the road from commencement, viz :</b>		
For grading, superstructure, iron, bridges, engineering expenses, etc. between Richmond and the Junction,	286,528 71	
For land damages between the Junction and the corporation line of the city of Richmond,	11,898 08	

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**\$ 2,225,532 90**

For land damages and right of way within the corporation of Richmond, including ground upon which depot buildings are erected,	-	-	-	16,819 52	
Buildings, and scales for depot in Richmond,	-	-	-	16,841 04	
					332,087 35
For lots purchased adjacent to depots in Richmond,	-				27,215 33
Expended in the construction of the road between the Junction and Gordonsville,	-	-	-		411,243 50
Expended in the construction of the road between Gordonsville and Woodville,	-	-	-		299,014 36
Expended in the construction of the road between Woodville and Meechum's river,	-	-	-		14,126 32
Expended in the construction of the road between Waynesborough and Staunton,	-	-	-		63,339 11
Expended on account of surveys of routes between Staunton and Covington,	-	-	-		4,503 08
Property now owned by the company, viz:					
Locomotive engines, passenger coaches, baggage cars, burthen cars, stationary engines, land, and workshops, with tools and fixtures, bags, and one negro man,	-				114 232 67
Real estate, three tenements in Richmond, near the line of the road,	-	-	-		3,600 00
Amount of the commonwealth's subscription to capital stock unpaid, viz:					
Under the acts of 1836 and '38,	-			1,200 00	
" " 1847,	-			5,767 79	
" " 1849,	-			10,162 69	
" " 1850,	-			146,515 97	
" " 1851,	-			127,500 00	
					291,146 45
Amount of individual and county subscription to capital stock unpaid, viz:					
Under the acts of 1836 and '38,	-			2,844 82	
" " 1847,	-			3,541 50	
" " 1848,	-			4,354 64	
" " 1849,	-			13,435 81	
" " 1850,	-			97,592 31	
					121,769 08
Dividends declared since commencement,					117,200 13
Paid for transportation expenses from commencement,					349,654 13
Paid interest within the year ending 30th Sept. 1851,					11,376 34
This sum, advanced from time to time to Elisha Motlen, on account of work done between the Junction and Richmond, amounting to \$18,000, (which by contract was to have been paid for in stock at par,) entitling him to 180 shares, but which has been transferred by him to the Virginia Central railroad company at \$50 per share and cancelled,	-	-	-		9,000 00
Debts due to the company other than on account of stock, viz:					
Due from individuals, as per statement B, open accounts,				16,854 22	
Due to individuals, as per statement B, notes,	-			4,582 93	
Cash on hand 30th September 1851, as per statement B,				34,587 90	
					\$ 2,225,532 90
					2,225,532



*Receipts and Disbursements within the year ending 30th September 1851.***Receipts:**

Balance of money on hand, per statements B, C, D and E of report to the Board of public works 30th September 1850, copies of which accompany this report,	17,097 40
Debts due to the company other than on account of stock, per statements B, C, D and E of report to the Board of public works 30th Sept. 1850,	22,558 08

**Receipts for transportation within the year ending 30th September 1851, viz:**

For use of cars by the Richmond, Fredericksburg and Potomac company from 1st October to 1st January,	878 74	
For freight,	70,682 63	
For passenger fare,	65,760 04	
For transportation of mail,	6,414 90	
For miscellaneous receipts, (materials sold,)	65 33	
		143,801 64
Rent of real estate,		227 50
Bonds issued to contractors for work done between the Junction and Richmond,		19,774 71
Bonds issued for loans authorized by the stockholders at their annual meeting in 1850,		31,878 07

**Receipts on account of capital stock, viz:**

Received from individual subscribers under the act of 1847,	3,102 69	
Under act 1848,	12,119 06	
Received from individual subscribers and Augusta county, under the act of 1849,	18,607 00	
Received from Monroe and Greenbrier counties, under the act of 1850,	2,407 69	
		36,236 44
Received from the commonwealth under the act of 1847,	2,932 74	
“ “ “ “ 1849,	27,871 53	
“ “ “ “ 1850,	3,484 03	
“ “ “ “ 1851,	120,000 00	
		154,288 30
Received from delinquent subscribers, interest on unpaid requisitions,		92 60
Due by company to individuals, open account,	5,152 33	
“ “ “ “ notes,	11,070 54	
		16,222 87

**Disbursements:**

Paid, debts due to individuals, reported on statements B, C, D and E of report to the Board of public works 30th September 1850, open accounts and notes,	41,302 82
Paid Board of public works, balance on account of loans,	7,006 00

**Paid on account of transportation expenses, viz:**

For depot expenses, consisting of agents' salaries and hand hire,	5,347 43	
For train expenses, consisting of conductors' salaries, wages of engine drivers, hire of train hands and firemen, repairs of engines and cars, and for oil, wood, &c.	26,188 35	
For salaries, consisting of salaries of president, superintendent, treasurer and clerk, and per diem pay to directors,	4,677 63	
For miscellaneous expenses, consisting of postage, printing, taxes, fixtures in office and depots, books, freight and passenger bills, &c.	2,274 87	
For repairs of road, consisting of purchase of new iron for repairs, (including 284 tons now on hand and not used,) sills, railing, negro hire, wages of overseers, and superintendents of hands,	40,326 50	
		78,814 78

# No. 18.]

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machinery, and	
for loan autho-	30,378 85
to contractors	
Richmond, this	
this sum.	11,376 34
	128 50

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	8,283 78	
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	653 18	
		71,903 67
		3,888 51
	4,889 74	
at depot in		
	27,215 33	
		32,105 07

the construction of the

	14,652 87	
	965 46	
diverts.	7,983 87	
	1,115 97	
	672 98	
	17,591 12	
		42,982 27
		4,090 85
		1,428 82

Woodville and Mee-

	13,101 28	
cost of sur-		
	1,025 04	
		14,126 32

the construction of the

	26,474 37	
	4,503 71	
	1,538 60	
surveys of routes between		32,516 68
Covington.		4,503 08
house and lot in Richmond near		600 00
from time to time to Elisha Melton, on		
done between the Junction and Rich-		
to \$18,000, (which by contract was to		
paid for in stock at par,) entitling him to 180		
which has been transferred by him to the Vir-		
railroad company at \$50 per share, and		
		9,000 00

Debts due to the company from individuals other than  
on account of stock, viz :  
amount due from agents for collections for  
fare and freight, and from post office depart-  
ment for transportation of mail, open ac-  
counts, - - - 16,854 22  
notes, - - - 4,582 93  
Cash on hand 30th September 1851, - 34,587 90

	56,025 05	
	<u>          </u>	<u>          </u>
\$ 442,177 61		442,177 61
	<u>          </u>	<u>          </u>

E. E.

J. GARRETT, *Treasurer.*

*A List of the Officers of the Virginia Central Railroad Company, and Amount of Salary paid to each.*

Edmund Fontaine, president, salary per annum,	-	-	-	\$1500
C. R. Mason, superintendent of transportation, salary per annum,	-	-	-	1200
J. Garrett, treasurer,	"	"	"	1200
C. J. F. Netherland, ticket agent and clerk,	"	"	"	600
Stephen Hunter, principal freight agent,	"	"	"	800
John A. Mosby, assistant,	"	"	"	550
R. M. Sizer,	"	"	"	420
Ro. D. Tyler,	"	"	"	300
John E. Mallory, agent at Hanover courthouse,	"	"	"	300
William Spicer,	"	Beaverdam,	"	250
N. W. Harris,	"	Frederickshall,	"	300
A. W. Talley,	"	Louisa courthouse,	"	300
J. C. Talley,	"	Trevilian's,	"	300
R. F. Omohundro,	"	Gordonsville,	"	300
Ashly J. Bell,	"	Cobham,	"	200
E. J. Timberlake,	"	Shadwell,	"	200
James Minor,	"	Charlottesville,	"	300
Wm. A. Moody,	}	Conductors—salaries,	"	480
T. L. Swift,				
Wm. Overton,	}	Directors appointed by the Board of public works.		
Alex. Rives,				
John H. Timberlake,				
Jefferson Kinney,				
David Anderson, Jr.	}	Directors elected by individual stockholders.		
Pay of directors, \$ 3 per diem for actual service.				

J. GARRETT, *Treasurer.*

*Statement of Receipts and Disbursements on account of the Survey of the Route between Staunton and Covington, authorized by the Act of 30th January 1850. Also, Statement of Amount Subscribed under said Act.*

Receipts:				
Amount received from the commonwealth,	-	-	-	3,484 08
Do. do. from Monroe county,	-	-	-	1,500 00
Do. do. from Greenbrier county,	-	-	-	907 69
				<u>\$5,891 72</u>
Disbursements:				
Amount paid on account of survey,	-	-	-	4,503 08
Balance in Farmers Bank of Virginia, subject to expenses on account of extension from Staunton to Covington,	-	-	-	1,388 64
				<u>\$5,891 72</u> <u>5,891 72</u>

E. E.

J. GARRETT, *Treasurer.*

*Monthly Comparison of Receipts for Fare and Freight for 1850 and 1851.*

MONTHS.				Receipts for passenger fare from 1st Oct. 1849, to 1st Oct. 1850.	Receipts for passenger fare from 1st Oct. 1850, to 1st Oct. 1851.	Rec'pts for freight from 1st October 1849, to 1st Oct. 1850.	Rec'pts for freight from 1st October 1850, to 1st Oct. 1851.
October,	-	-	-	2920 28	4529 04	2877 90	4078 98
November,	-	-	-	2114 60	2850 67	4012 71	3662 42
December,	-	-	-	4708 14	6123 25	2787 83	2963 91
January,	-	-	-	2421 81	5036 54	2250 06	4817 08
February,	-	-	-	2954 31	3747 42	2684 05	6737 79
March,	-	-	-	3534 25	5023 70	3286 59	8188 67
April,	-	-	-	2411 22	4994 47	2481 94	7032 35
May,	-	-	-	2777 71	4985 90	1860 84	6986 16
June,	-	-	-	4965 67	6324 72	1492 71	4196 17
July,	-	-	-	6001 31	6478 43	1497 95	4983 85
August,	-	-	-	6817 85	7321 62	3065 06	8344 60
September,	-	-	-	7416 09	8343 28	4265 99	8670 45
				\$ 49043 24	65760 04	32563 63	70682 63

J. GARRETT, *Treasurer.*

*Memorandum of Locomotives, Passenger Cars, Freight Cars, and Supply of Timber.*

\*7 locomotives.  
5 passenger coaches.  
3 baggage cars.  
100 four wheel freight cars.  
23 eight wheel do.  
9 dirt cars.  
16 hand cars.  
2 stationary locomotives, one in good order and in daily operation, the other upon stocks for repairs.  
Ten thousand dollars worth of timber now on the road, including rails, sills, and car timber.

C. R. MASON.

*Length of Road.*

Length of the road from Richmond to Staunton,	-	137 miles
Finished and in operation to Charlottesville,	-	98 "
Rails now being laid on a section beyond Charlottesville, and will be finished in November,	-	8 "
Unfinished,	-	31 "

The whole distance to Covington will be about 200 miles.  
The road is kept in repair by laborers employed by the company.  
Draining, leveling and general supervision of the roadway is entrusted to two overseers, who divide the distance between Richmond and Charlottesville.  
The superstructure or track of the road is divided into sections of about twelve miles each, under the care of a man with a gang of hands.  
In addition to this, a spike driver passes over each of these sections daily, and sometime oftener.

E. FONTAINE, *President.*

\* Since the above was made out, there has been one locomotive added to the number above mentioned.

## REPORT OF COMMITTEE TO EXAMINE THE ROAD.

The undersigned, a committee appointed at the last general meeting of the stockholders of the Central railroad company to examine the condition of the road, state that on the 28th May they commenced an inspection of the road, and on that and the following day passed over the entire extent from Richmond to Charlottesville.

Before making a detailed report, which they will present to the next general meeting, they think proper to make known, for the information of the stockholders, that they found the whole road from Richmond to Charlottesville, a distance of about a hundred miles, in good order, and far better than they supposed was possible, considering the heavy freights that have been carried over it. More passenger cars for the summer's travel and locomotives and burden cars will be required—these last to be ready in time for the crop of wheat now growing. They are informed that two new passenger cars, four locomotives and about thirty burden cars, in addition to those now owned by the company, will soon be placed on the road. The committee cannot too strongly urge on the president and directors the necessity of providing ample means for the transportation of produce; and with the increase of engines and cars above stated, they believe there will be furnished abundant facilities for doing so with promptitude and despatch.

(Signed,)

ROBT. H. NELSON,  
WM. F. WICKHAM,  
JNO. R. QUARLES,  
B. M. JONES.

## REPORT OF COMMITTEE ON THE STATE OF THE ROAD.

To the Stockholders of the Virginia Central Railroad Company.

On the 27th of October 1851 the undersigned, two of the committee to examine the Central railroad, commenced a re-examination of the said road. The undersigned, Robert H. Nelson, examined that portion of the road west of Charlottesville, as far as the iron was laid down, and is sorry to have to report that both the grading and superstructure are very badly executed, both the cuts and embankments being too narrow, and a large portion of the sawed timber used as sills being of red oak of inferior quality.\* He also examined the road between Charlottesville and Gordonsville, and reports it to be in as good condition as could be expected, considering the heavy freights that are carried over it. At Gordonsville he was joined by Mr. John R.

\* When this portion of the report was read, the president stated to the meeting that it was an act of justice to both the engineers and contractors to inform the company that the section of the road alluded to was not finished.

Quarles; and from that place to Richmond the road was examined by both the undersigned. They are pleased to have it in their power to report that part of the road in very good condition.

The work shops at the Junction have been somewhat enlarged and improved since the report of last year.

The company have 8 locomotive engines, 5 coaches, 4 baggage cars and 151 burden cars, all in good repair.

They have in their employment, besides the president and directors, superintendent and treasurer :

12 depot agents, nine of whom furnish two depot hands each,	
at an aggregate cost of	5,980
1 ticket agent in Richmond, acting also as assistant treasurer,	600
28 white and colored hands in shops at Junction and Richmond,	6,202
18 hands in depots and yards at Junction and Richmond,	1,670
8 white and 11 colored men on trains as agents, engineers,	
firemen, &c.	5,640
3 overseers on road,	975
12 carpenters repairing superstructure on road, &c.	3,124
68 colored hands to keep road in repair,	5,296
1 night-watch in Richmond,	365
	<hr/>
	<b>\$ 29,852</b>

They fully concur with the president and directors in their recommendation that the road from the Junction to Richmond be laid with the U rail as soon as possible, for the reasons assigned by them.

ROBT. H. NELSON,  
JOHN R. QUARLES.

RICHMOND, Oct. 28th, 1851.

To the Stockholders of the Virginia Central Railroad Company.

GENTLEMEN,

At the last annual meeting of the company, you thought proper to select me as one of a committee of five to examine the road from Richmond to Charlottesville. We were summoned by the chairman of the committee, Dr. Robert Nelson, of Hanover, to meet in the city of Richmond on the 27th day of May past. Four of the five of the committee met, viz: Dr. R. Nelson, Mr. Wm. Wickham, Mr. Quarles, of Louisa, and B. M. Jones, the undersigned, from Fluvanna. On the 28th we commenced the examination, proceeding slowly on the hand cars. In passing the bridges we stopped and examined them minutely, and the road generally. The first day we reached Louisa courthouse. On the second day, the 29th, we proceeded on with our examination of the roads and bridges. When we reached



the Rivanna bridge, after passing over it, we got out and gave it a thorough examination; likewise the bridge across Moore's creek; thence to the town of Charlottesville. We then made a report favorable, as we found the road in good condition, which report I presume will be laid before you, as it was sent to the president and directors. The chairman of the committee notified us to meet again on the 27th of October, in the town of Charlottesville. Dr. Nelson reached town on the 26th, and at an early hour on the 27th commenced the examination *solus*, and proceeded on in the hand cars, with the superintendent, down to near Gordonsville; at that place Mr. Quarles joined him. I reached Charlottesville too late, although I reached that place forty minutes after 7 A. M. on the 27th, after riding thirteen miles, which the undersigned regrets, as he considers the chairman was rather precipitate, more especially as he was alone. On the 28th I took the mail train at Keswick turn out on Tuesday morning, and gave the road as careful an examination as was possible, (though I must acknowledge that my examination was *very imperfect*.) To all appearance, the road was in tolerable good repair. I would here suggest the propriety, in my humble opinion, that during the next year the small rail from Gordonsville to the Junction should be taken up and the heavy rail used in its stead, more especially when we see the great and increasing amount of transportation on the road during the present year, which will continue if the road is put in good and complete repair, and the charges reduced to the lowest possible rate, to prevent a loss to the stockholders. The Rivanna navigation is out of repair, and will not be complete in twelve months so as to interfere with the railroad. I would suggest the propriety of the superintendent of the road collecting, from Frederickshall down, all the iron that has been thrown out in the repairs, and carry it to the depot in Richmond, and dispose of it at as early a day as possible. The undersigned would here remark that the company, in his opinion, has been truly fortunate in procuring the services of Mr. Mason, the present superintendent of the road, whom I consider to be one of the most industrious, persevering and indefatigable men I have met with, though some have complained. If they only knew the great disadvantages under which he labored, these complaints would be changed to praise.

B. M. JONES,  
*One of the Committee of Examination.*

## ENGINEER'S REPORT.

ENGINEER'S OFFICE, CHARLOTTESVILLE,  
October 29th, 1851.

To the President and Directors Virginia Central Railroad.

GENTLEMEN,

In accordance with your instructions, the surveys westward from Staunton to Covington were commenced last November.

The charge of these surveys, by way of Buffalo gap, were given to Mr. E. P. Goddard; and as it was your intention to have a most thorough survey made of all the different routes between Staunton and Covington, his directions were to run merely experimental lines, noting well the topography of the country. The result of his surveys was the line he reported last January—commencing at Staunton and running to Covington by way of Buffalo gap. He reported this route could be improved *in distance, grades and cost*. But I thought it advisable to have the Jennings' gap carefully surveyed before any improvements were attempted. The survey of the Jennings' gap route was entrusted to Mr. H. D. Whitcomb; his line was run by Col. Wm. Bell's to Jennings' gap; thence to Cloverdale; thence following the valley of Stunt's creek six miles, it follows near the location of the Harrisonburg and Warm springs turnpike to within one mile of the Cowpasture bridge; thence crossing the Cowpasture, it follows Crumby's run to its source; thence it follows upon the waters of Porter's mill creek, following it to its head. The line then falls upon the valley of Wilson's creek, and following it, joins the Buffalo gap route near Clifton forge.

The length of the Jennings' gap route from Staunton to					
near Clifton Forge was	-	-	-	-	64½ miles.
The Buffalo gap to the same point was	-	-	-	-	58½ "
					<hr/>
Difference in distance,	-	-	-	-	6 "

This route being six miles the longer, was objectionable, and I directed Mr. Whitcomb to re-survey the Buffalo gap. The result has been most satisfactory. It has "surrendered" to seventy feet grade going east and eighty going west. The cut at the summit being only forty feet, the eighty feet grade west has curves of large radii. I consider it as favorable as seventy going east, as in a busy season one-third of the returning cars are empty.

This route, in comparison with the Jennings' gap, being shorter and cheaper, I consider it should be adopted. This six miles difference in distance saves \$33,000 in the superstructure, and a yearly expense of \$4,000 in the repairs. The estimated cost of the Buffalo gap route for thirty-five miles west of Staunton is \$378,000 for grading and masonry, being \$10,800 per mile. I am in hopes to have this section ready to let by the first of December, and by the first of March the whole line to Covington. Mr. Whitcomb is now engaged

west of Milboro'. He is very sanguine his grades will not exceed 70 feet per mile.

Mr. Goddard did all that could be done in the short time he was engaged. He would have improved his line, but a better offer secured his services on another road. Mr. Whitcomb's duties have been incessant. The result of his survey speaks for itself. He and Mr. Goddard are both energetic, capable and zealous in the discharge of their duties. For particulars of their surveys I refer to their reports.

The following is the general description of the Buffalo gap route :

Commencing at Staunton, the line follows the valley of Peyton's run to its head ; thence follows the general location of the old Buffalo gap road to within two miles of Pitman's ; thence keeping on the side of the Little North mountain, it passes through the Buffalo gap, making at "the divide of the waters" a cut of forty feet in depth ; thence continuing for seven miles on the side of the Little North mountain, it reaches the valley of the Little Calpasture ; thence it follows that stream for three miles ; thence leaving it, crosses the Free turnpike to the Warm springs near Mr. Craig's ; thence it follows the general route of the turnpike through the Panther gap, a distance of 34 miles from Staunton. Beyond this point the surveys are not complete. Enough has been done to indicate a preference for following Cabin Draft to near its head ; thence crossing the long spur of Mill mountain and the head waters of Lick run ; thence through a gap between the Short mountain and Mill mountain to the south fork of Padd's creek, and following it to its junction with the Cowpasture river ; thence crossing the river, we follow it to the mouth of Shaver's run, and leaving, follow that stream for a short distance, and fall upon the waters of Wilson's creek near its junction with Jackson's river near Clifton Forge ; thence it follows the valley of Jackson's river to Covington, distant from Staunton 73 miles. There is good reason to believe that this route will still be shortened three miles between Padd's creek and Jackson's river.

*The construction of the road* between Charlottesville and Meechum's river is progressing rapidly. The cars will run in December to Woodville, and during the summer to Meechum's river, thus securing the Augusta trade. A barrel of flour from Staunton to Richmond, by way of the railroad, will then cost eighty cents ; by way of Scottsville one hundred and ten cents—difference in favor of the railroad thirty cents. Two days in time will also be gained, the distance gained being seventeen miles.

The grading of the road between Staunton and Waynesborough will be finished by the 1st of July ; and as the iron will be ready by that time, I feel satisfied that portion of the road from Staunton, fifteen miles east, to the tunnel, will be ready by October.

This distance is by staging three hours and a half—by railroad it will be three quarters of an hour. Passengers will thus arrive in Richmond and Staunton three hours sooner by the completion of this portion of the work.

I recommend to the board most earnestly that the road between the Junction and Gordonsville, the oldest portion between Richmond and Charlottesville, be relaid during the coming summer with a heavy

rail. It will be equivalent to reducing the grades one-eighth, and expenses \$ 200 per mile.

The freights of the last three months have been three times as much as the corresponding months of last year. Next year the further extension from Charlottesville to Meechum's river will at least double the freights of the last three months.

Understanding the board intend speaking of the necessity of relaying this portion of the road at the yearly meeting of the stockholders, I hope whatever request they make will be granted.

Very respectfully, gentlemen,

Your obedient servant,

T. COLDEN RUGGLES,  
*Chief Engineer.*

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#### COMMITTEE ON TREASURER'S ACCOUNTS.

The committee appointed at the last meeting of the stockholders "to examine the books and accounts of the treasurer and the financial affairs of the company generally," having performed that duty, beg leave to make the following report:

That (with the exception of occasional slight arithmetical errors) they have found the treasurer's books and accounts neatly and properly kept, and all the different items sustained by satisfactory vouchers. For definite information concerning the financial condition of the company, you are referred to the tabular statements embodied in the report of the president and directors, which we believe to be strictly correct.

In the opinion of your committee, the president and directors have been fortunate in the selection of their treasurer and his assistant. Considering the expensiveness of a city residence, the great labor performed and the very great responsibility arising from the large amount of money handled, we are unanimously of the opinion that the compensation of the treasurer and the depot agents in Richmond is insufficient.

It has been represented to your committee that complaint is made of partiality and favoritism in granting to persons the privilege of travelling *free* on the cars. Your committee would respectfully suggest the propriety of requiring the conductors of trains to furnish your clerk with a list of all persons to whom that privilege is granted, and that the same be reported to the stockholders.

In conclusion, your committee deem it unnecessary to have two committees to examine the treasurer's accounts, and suggest the propriety of rescinding the by-law requiring a committee of the directory to perform this service, or else dispense with the committee of the stockholders.

All of which is respectfully submitted.

RICHARD GWATHMEY,  
M. M. BROWN,  
ROBERT M. KENT.

## STANDING COMMITTEES.

The following are the standing committees appointed by the chairman, viz :

*Committee to examine the road*—Messrs. Thomas Doswell, of Hanover, Francis R. Nelson, of Albemarle and Alexander F. Butler, of Louisa.

*Committee to examine the books and accounts of the treasurer*—Messrs. Philip H. Jones, of Louisa, Benjamin H. Magruder, of Albemarle, Wm. C. Wickham, of Hanover, Wellington Goddin, of the city of Richmond, and Wm. M. Ambler, of Louisa.

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BY-LAWS.

1st. The general meetings of the stockholders, both annual and extra, shall be held at Louisa courthouse, unless otherwise ordered by a vote of the stockholders in general meeting.

2d. The annual meeting shall be held on the Thursday before the first Monday in August\* of each year.

3d. Special meetings of the stockholders may be called whenever in the judgment of the president and directors the interest of the company requires it.

4th. The ayes and noes upon any question shall be spread upon the journal whenever required by any ten stockholders present.

5th. A roll of the stockholders in alphabetical order, with the number of shares held by each, and the number of votes each is entitled to, set opposite his name, shall be made by the clerk of the company, and laid before the stockholders at each meeting.

6th. The books of the company shall be balanced quarterly, viz: on the first day of January, April, July and October, and it shall be the duty of the president to appoint a committee of the board of directors to examine the books of the treasurer immediately after each of the above periods, and see that his entries are sustained by proper vouchers.

7th. The money of the company, not necessarily remaining in the hands of the treasurer for the daily settlement of claims against the company, shall be deposited in such of the banks as the president and directors may order; and the treasurer and every other officer of the company, who may be in the receipt of money of the company, shall give such security for the faithful discharge of his duty as the president and directors may direct.

8th. No money shall be drawn out of bank except by the warrant of the treasurer, countersigned by the acting president, except in payment of one of those officers on account of salaries due to them respectively, when the warrant shall be drawn by the other, and every warrant shall express on its face on what account it was drawn.

\*The period of the annual meetings has been changed, and will hereafter be held on Friday before the first Monday in November in each year.

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by the stockholders,  
directors, payable quar  
shall be a per diem fixed  
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acts, and enquiring into the  
in which their books and  
the duty of such committee  
such examination and en  
as in their opinion will tend  
usefulness of the respective  
and prohibition of all unne  
tical system and efficient or  
management of the same.

the company shall act as proxy  
and it shall not be lawful for the  
or superintendent, to be inte  
contract made by the board of di  
advertised for at least twenty days  
contract is to be executed.  
shall have power, from time to  
as, not inconsistent with the laws  
company, as experience may shew  
enforced, till the next annual or  
to be laid before the stockholders

pany shall be published annually  
meetings.

MAC RAILROAD COMPANY.

stockholders of the Winchester and  
Oct. 25, 1851, William L. Clark, presi-

E. Cook, Esqrs. were appointed a  
quorum was present, which committee,  
there was a quorum present.  
annual report of the president and di  
the accompanying statements of the

the last meeting of the stockholders  
their report, which was approved.

William Miller, Jonathan Smith, M. B.  
any three of whom may act, were ap  
sance of a by-law adopted at a general  
August 1837, to examine into the con-



dition and management of the road, and to recommend such measures as in their opinion will tend to promote the permanence, value and usefulness of the road.

On motion of D. W. Barton, Esq.

*Resolved unanimously*, That William L. Clark, president, and A. S. Baldwin, Henry M. Brent, William B. Baker, and Hugh H. McGuire, directors, be and they are hereby re-elected for the ensuing year.

The Hon J. M. Mason moved that the salary of the president be increased the sum of \$ 2,500, and thereupon Mr. Clark called John W. Page, Esq. to the chair and withdrew.

A motion was then made to lay the said motion on the table, which was lost.

And thereupon it was

*Resolved, unanimously*, That when this meeting adjourn, it adjourn to meet at this place on this day two weeks to consider the said motion. Robert Y. Conrad, Esq. moved that a committee be appointed to ascertain the right of the state to vote in the meetings of this company; which was lost, the vote standing as follows: Ayes 818, noes 2,037.

On motion of the Hon. J. M. Mason,

*Resolved*, That the president be directed to obtain the advice of counsel as to the right of the state to vote in the meetings of this company.

And then the meeting adjourned to Saturday, the 8th of November next, agreeably to a former resolution.

Test,

W. L. BENT, *Secretary*.

*Twentieth Annual Report of the President and Directors of the Winchester and Potomac Railroad Company.*

The revenue of the company for the last fiscal year, to wit: from the 1st day of October 1850 to the 1st day of October 1851, is \$ 98,486 07, being one thousand six hundred and twenty-three dollars and fifty-one cents more than the preceding twelve months, and is the largest revenue which has been received in any one year of the company's operations.

There have been transported over the road during the year thirty-seven thousand one hundred and eleven tons, of which twenty-three thousand five hundred tons are from west to east, and thirteen thousand six hundred tons were from east to west.

Of the tonnage eastward, twenty thousand two hundred and forty-nine tons were from flour, or two hundred and two thousand four hundred and ninety-four barrels, being nine thousand three hundred and sixty-four barrels less than the preceding year. In iron there have been only six hundred and seventy-seven tons, being eight hundred and forty-six tons less than the year preceding.

There have been eight hundred and thirty-six tons of plaster less

carried this year than the year before, whilst there has been an increase in coal and manganese. Of cattle there have been three hundred and ninety-five head, or two hundred and thirty-seven tons.

The tonnage westward in merchandize has been nine thousand seven hundred and ten tons this year, against nine thousand eight hundred and twenty-four tons of last year.

There has been an increase in the revenue from passengers of \$2,625 80, the amount from that source this year being \$26,487 17, against \$23,861 37 last year.

The revenue of the road has been disbursed in accordance with the treasurer's statement B, being part of his report made herewith. In the item of motive power is included the purchase of a new locomotive engine, and in that of repairs is included the iron and other materials purchased to complete the reconstruction of the road.

The whole road has now been relaid. The company have six locomotive engines in running order; forty large freight cars; four passenger cars, with abundant materials in the form of duplicates and otherwise, so as to preclude the idea that it cannot promptly discharge all its obligations to the public.

The road has been worked during the last year at a monthly expense not exceeding thirty-six hundred dollars. There has been no accident during the year by which any person has been at all injured or any material loss sustained. The passenger trains have been run at an average speed of two hours and five minutes, including stoppages, and there has been but one failure of the mail on this road during the year.

The whole business of the year has been transacted with a loss and damage account of thirty-nine dollars and twenty-eight cents.

A dividend of six per cent. was declared on the 1st of May last, and an additional one of six per cent. is declared, and payable on the 1st of November. And there is no reason to anticipate any change in this respect in the condition of things.

All which is respectfully reported.

W. L. CLARK, *President.*



## [ A.]

## TREASURER'S STATEMENTS.

*Revenue Receipts for the year ending September 30, 1851.*

Balance of cash and uncollected freights on hand Sept. 30, 1850,	-	6,475	38
1850—October,	-	11,013	59
November,	-	7,794	61
December,	-	7,905	06
1851—January,	-	7,392	57
February,	-	6,651	15
March,	-	8,486	78
April,	-	9,891	41
May,	-	9,205	32
June,	-	5,895	35
July,	-	6,138	22
August,	-	7,889	71
September,	-	10,222	31
		<hr/>	
		104,961	43
Old materials sold,	-	7,840	10
Rents, (Charlestown depot,)	-	400	00
Telegraph receipts,	-	30	43
From Valley Bank,	-	4,946	67
		<hr/>	
		<b>\$ 118,178</b>	<b>63</b>



[ C.]

Revenue compared with last year.

1849.				1850.			
October,	-	-	11,432 37	October,	-	-	11,013 59
November,	-	-	8,394 43	November,	-	-	7,794 61
December,	-	-	6,379 15	December,	-	-	7,905 05
1850.				1851.			
January,	-	-	6,877 72	January,	-	-	7,392 57
February,	-	-	6,609 00	February,	-	-	6,651 15
March,	-	-	8,159 33	March,	-	-	8,486 78
April,	-	-	9,366 43	April,	-	-	9,891 41
May,	-	-	9,662 16	May,	-	-	9,205 32
June,	-	-	7,780 64	June,	-	-	5,895 35
July,	-	-	6,204 72	July,	-	-	6,138 22
August,	-	-	7,646 44	August,	-	-	7,889 71
September,	-	-	8,350 17	September,	-	-	10,222 31
			<u>\$ 96,862 56</u>				<u>\$ 98,486 07</u>
Difference in favor of the present year,				-			
							<u>\$1,623 51</u>

Passenger Fare compared with last year.

This year:				
16,112 passengers,	-	-	-	26,487 17
Last year:				
15,035 passengers,	-	-	-	23,861 37
Difference in favor of present year,				<u>\$2,625 80</u>

[ D.]

Tonnage Eastward.			Tons.	Tonnage Westward.			Tons.
Flour, (202,494 bbls.)	-	-	20249	Merchandize,	-	-	9710
Merchandize and produce,	-	-	2177	Plaster,	-	-	2962
Iron, (pig and bloom,)	-	-	677	Coal,	-	-	1638
Manganese,	-	-	220				
Beef cattle, (359 head,)	-	-	237				
							13611
							23500

Aggregate tonnage per annum, - - - - - 37111  
Or a daily average for each working day of 123 tons.

[ E.]

*Financial Condition of the Company on September 30th, 1851.*

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---

tal stock,	-	-	-	-	-	\$ 180,000 00
led debt, (due in 1867,)	-	-	-	-	-	120,000 00
uity to the state, \$ 5,000 ; principal,	-	-	-	-	-	83,333 33½
ing debt,	-	-	-	-	-	28,811 69

[D.]

Tonnage Eastward.	Tons.	
Flour, (202,494 bbls.)	20249	M r
Merchandise and produce,	2177	Pla
Iron, (pig and bloom,)	677	Cm
Manganese,	220	
Beef cattle, (359 head,)	237	

Aggregate tonnage per annum,  
Or a daily average for each working day of 123

- - - - -

ation of the railroad  
- - - - - manner in which it  
- - - - - sat duty, and respect

- - - - - provided a special train  
- - - - - Winchester to Har-  
- - - - - line. The committee  
- - - - - them have performed  
- - - - - never seen the road in  
- - - - - present. The heavy iron  
- - - - - from Winchester to Har-  
- - - - - laid since the last annual  
- - - - - tice, with the most care-  
- - - - - defect on the road either  
- - - - - small bridges, your com-  
- - - - - enquiry they found that all  
- - - - - ready on the ground and in  
- - - - - where the Shenandoah river  
- - - - - road, your committee ob-  
- - - - - nearly a quarter of a mile, all  
- - - - - last year; and a most impor-  
- - - - - ver, so that your committee  
- - - - - order, and for comfort and  
- - - - - agement of the engines or at  
- - - - - any of the southern roads—  
- - - - - of the trains and the entire  
- - - - - twelve months.  
- - - - - work shops and found them all  
- - - - - keeping the engines and cars in

- - - - - at Winchester and Harper's  
- - - - - into the books and accounts  
- - - - - with the system and neatness  
- - - - - principal agents at Winchester  
- - - - - in the service of the company  
- - - - - credit for the faithful manner  
- - - - - duties.

- - - - - assure that the company have  
- - - - - the line of the road. Upon en-  
- - - - - a thousand cords of wood of  
- - - - - amount of duplicate machinery for  
- - - - - ensuring at all times prompt repair

- - - - - safe, and substantial road. They  
- - - - - running order, two of which have  
- - - - - forty large freight cars, all of  
- - - - - own shops; they have four pas-  
- - - - - convenience for comfort and travel

ating of the stockholders, they have received  
 6 per cent. on their stock, and another semi-  
 cent. is declared and payable on the 1st of  
 g. with the former dividend, the sum of fifty-  
 hundred dollars (\$ 55,800) paid the stockholders  
 being within a fraction of one-third of the

not, before closing this report, but express their  
 zealous and efficient manner in which the pre-  
 the affairs of the company and brought them to  
 it. And they respectfully recommend that the  
 like approbation in such form as they may deem

respectfully reported.

J. SENSENY, *Chairman.*  
 JONATHAN SMITH,  
 W. M. MILLER,  
 EDWARD E. COOKE.  
*Committee.*

October 24th, 1851.

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OFFICE WIN. AND PO. RAILROAD CO.  
 October 31, 1851.

*of Public Works.*

SIR,

I have the honor herewith to transmit to you the  
 report of the condition of this company.

Very respectfully,

W. L. CLARK, *President.*

BROWN, Jr., *Second Aud.*

[ Doc. No. 18.]

*Winchester and Potomac Railroad, September 30, 1901.*

Expenses for construction,	441,308 69	
Expenses for repairs work shops, &c.	18,248 69	
Land acquisition	43,081 07	
Other assets.	6,777 50	
	<u>509,415 95</u>	
Balance forward of engines.	47,000 00	
Balance forward of passenger and freight cars and repairs of same—re-		
ward to engines and wages of engi-		
neers and hands on trains.	264,462 03	
Depreciation.	70,825 78	
Depreciation.	17,047 66	
Freight and agents' commissions,	78,756 36	
Repairs, including books, station-		
ery, freight and printing.	20,020 24	
Depreciation.	8,199 10	
Other expenses.	1,500 79	
	<u>507,811 96</u>	
Deposits in bank in which is included		
construction of the road, work shops,		
&c.	359,701 20	
Deposits for temporary loans and funded		
debt.	159,597 51	
Other assets.	20,000 00	
Depreciation.	75,038 58	
Depreciation.	18,304 48	
Depreciation.	5,176 52	
Depreciation.	19,111 52	
Depreciation.	1,193 21	
Depreciation.	42,493 24	
	<u>700,616 26</u>	
Deposits in bank and weights outstanding,	5,689 29	
Deposits in bank and weights outstanding	6,475 36	
Deposits in bank and duplicate machinery,		
&c.	20,406 42	
	<u>32,571 07</u>	
Deposits in bank		300,000 00
Deposits in bank		1,151,683 55
Deposits in bank		150,000 00
Deposits in bank due to banks and individuals,		142,911 09
	<u>\$1,750,415 24</u>	<u>1,750,415 24</u>

The sum of \$1,750,415 24 of the capital stock, has, by an act of the general assembly, been committed to the use of the Commonwealth.



**Receipts and Disbursements of the Winchester and Potomac Railroad Company  
for the year ending September 30th, 1851.**

<b>To</b>	repairs of road,	-	-	-	23,037	15	
	Motive power,	-	-	-	21,587	80	
	Fuel expense,	-	-	-	7,302	14	
	Agents' commissions and drawbacks,	-	-	-	8,645	00	
	Depot expense, including books, stationery, postage and printing,	-	-	-	2,255	68	
	Contingent expense,	-	-	-	660	35	
	Interest on loans and funded debt,	-	-	-	9,239	04	
	Improvements,	-	-	-	2,524	94	
	Loss and damage,	-	-	-	39	28	
	Officers' salaries,	-	-	-	4,566	63	
	Oil expense,	-	-	-	1,220	28	
	Mail expense,	-	-	-	120	00	
	Bank debts,	-	-	-	5,000	00	
	Law expense and taxes,	-	-	-	295	04	
	State annuity,	-	-	-	5,000	00	
	Dividends paid,	-	-	-	20,996	00	
	Cash in hand and freights outstanding,	-	-	-	5,689	29	
<b>By</b>	revenue from passengers, tonnage and mail,	-	-	-			98,486 07
	Sale of old materials, rents, &c.	-	-	-			13,217 19
	Cash in hand and freights outstanding last year,	-	-	-			6,475 36
					<u>\$118,178</u>	<u>62</u>	<u>118,178 62</u>

**Officers of the Company and their Salaries.**

<b>Wm. L. Clark,</b>	president,	-	-	-	1,700	00	
<b>J. Geo. Heist,</b>	principal agent and treasurer,	-	-	-	1,500	00	
<b>Sam'l Wright,</b>	superintendent of machinery,	-	-	-	750	00	
<b>Jno. Mansfield,</b>	clerk,	-	-	-	600	00	
<b>Hy. Brown,</b>	agent and clerk at Harper's Ferry,	-	-	-	700	00	
<b>Wm. L. Bent,</b>	secretary and transfer clerk,	-	-	-	200	00	
<b>Lewis Barley,</b>	conductor of passenger trains,	-	-	-	400	00	
							<u>\$5,850 00</u>

Length of the road 32 miles.

Kept in repair by daily service and superintendence.

Average cost per mile per annum \$1353.

**J. GEO. HEIST, Treasurer.**

*Winchester Depot, Oct. 31st, 1851.*

2  
coal trade in the month of April last  
ease in the receipts. The whole trans-  
idria canal for the first six months ended  
47,650 tons; and we confidently look  
probably greater, increase.

be,

pectfully,

Your ob't serv't,

JOS. FACHES, Pres.  
*Alexandria Canal Company.*

PRESIDENT AND DIRECTORS.

OFFICE ALEXANDRIA CANAL CO.  
June 2d, 1851.

The board of directors, owing to causes stated  
stockholders on the first Monday in May last,  
report. They now submit a statement of the  
any, and the proceedings of the president and  
year ending the 25th of April.  
in the last annual communication, of the neces-  
sive improvements and repairs on the line of the  
it, raising and widening the banks, &c. to con-  
ments then making and about to be made on the  
canal; that, for that purpose, the board of di-  
ted with the common council of Alexandria, on  
1850, for a loan of \$23,000, (though not deemed  
at \$7,000 of said loan had then been received, and  
ereof applied towards those repairs. You  
divided of the common council of Alexandria, by act  
ary 1849, having authorized a loan to the company  
the purpose of constructing wharves, &c. at the outlet  
the use of the Maryland mining company; and in  
report you were informed, that of that loan the com-  
\$10,000, and applied it to the purposes originally  
directors proceeded with the two works, and as had  
the loan for repairs and improvements on the line of  
the Maryland mining company exceeded the sum  
of inadequate; but that for the construction of the  
the Maryland mining company had the cost of  
that work about as much as the deficiency in the former,  
the wharf loan having been for \$25,000 and the canal  
over \$15,000.) On the 17th of July 1850, the canal  
if the common council authority to apply the excess of

### III. NAVIGATION COMPANIES.

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#### ALEXANDRIA CANAL COMPANY.

OFFICE ALEXANDRIA CANAL CO.  
October 15th, 1851.

TO W. R. DRINKARD, ESQ.  
*Sec'y Board of Pub. Works.*

SIR,

In compliance with your circular of 1st September 1851, the president and directors of the Alexandria canal company herewith transmit you a printed copy of their annual report, made up to the 25th day of April last; a manuscript return to the same date, corresponding with the *formula* accompanying your circular; a list of the stockholders on the 30th of September, and a list of the officers, agents, &c. of the company, and their salaries or compensation.

By reference to the annual report, it will be seen that the balance in the hands of the treasurer on the 25th April was \$ 29 97; since which there has been received :

From tolls,	-	-	-	-	-	2,371 62
“ rents,	-	-	-	-	-	230 22
“ wharfages,	-	-	-	-	-	1,691 81
“ loans,	-	-	-	-	-	492 87
“ sundries,	-	-	-	-	-	6 72

Total receipts,	-	-	-	-	-	4,823 21
-----------------	---	---	---	---	---	----------

And there has been disbursed :

For repairs, improvements and superintendence,	2,692 22
“ purchase of land,	334 01
“ loans, redemption of,	300 00
“ interest,	23 61
“ incidentals,	48 34
	<hr/> 3,398 18

Leaving on hand 5th October 1851,	-	<hr/> \$ 1,425 03
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Since the opening of the coal trade in the month of April last, there has been a gradual increase in the receipts. The whole transportation of coal on the Alexandria canal for the first six months ending 30th September, has been 47,650 tons; and we confidently look forward to a continued, and probably greater, increase.

I have the honor to be,

Very respectfully,

Your ob't serv't,

JOS. EACHES, *Pres.*  
*Alexandria Canal Company.*

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## REPORT OF PRESIDENT AND DIRECTORS.

OFFICE ALEXANDRIA CANAL CO.  
June 2d, 1851.

### *To the Stockholders.*

The board of directors, owing to causes stated at the meeting of the stockholders on the first Monday in May last, were not able then to report. They now submit a statement of the accounts of the company, and the proceedings of the president and directors for the last year ending the 25th of April.

You were informed, in the last annual communication, of the necessity of making extensive improvements and repairs on the line of the canal, by deepening it, raising and widening the banks, &c. to conform to the improvements then making and about to be made on the Chesapeake and Ohio canal; that, for that purpose, the board of directors had contracted with the common council of Alexandria, on the 15th of January 1850, for a loan of \$23,000, (though not deemed sufficient;) and that \$7,000 of said loan had then been received, and the greater part thereof applied towards making those repairs. You had before been advised of the common council of Alexandria, by act of the 12th January 1849, having authorized a loan to the company of \$25,000 for the purpose of constructing wharves, &c. at the outlet of the canal, for the use of the Maryland mining company; and in the last annual report you were informed, that of that loan the company had drawn \$10,000, and applied it to the purposes originally designed. The directors proceeded with the two works, and as had been anticipated, the loan for repairs and improvements on the line of the canal proved inadequate; but that for the construction of the wharves, &c. for the Maryland mining company exceeded the sum necessary for that work about as much as the deficiency in the former, (say \$10,000, the wharf loan having been for \$25,000 and the cost of the wharf little over \$15,000.) On the 17th of July 1850, the canal board asked of the common council authority to apply the excess of

the wharf loan to the purpose of repairs; and on the 5th of August 1850, the common council passed the following order:

*Resolved*, That the Alexandria canal company be authorized to apply to the purpose of putting their canal in order for the coal trade so much of the loan of \$25,000 made to said company by this corporation, by resolution of council of 12th January 1849, as may not be required for the purpose therein mentioned."

In accordance with which, such excess was expended. In the latter part of the month of August the repairs were completed, and the navigation of the canal resumed. On the 15th of October, in a communication from the president of this board to the Board of public works, he concluded by saying, that "the Chesapeake and Ohio canal is navigable to Cumberland, our line in good order, and I now have the pleasure to announce the arrival last night at Alexandria of the first boat laden with coal from Cumberland."

On the 30th of October the president of the company, by order of the board of directors, informed the president of the Maryland mining company that the wharf contracted to be built for that company was completed according to contract, and ready for use. The period limited for its construction was one month from the completion of the Chesapeake and Ohio canal to Cumberland, which expired on the 10th of November, the canal having been completed to Cumberland on the 10th of October 1850.

Notwithstanding the apparent good order of the canal, the heavy rains in the latter part of October did considerable damage to the berm bank at Wankopin; and owing to the defective foundation at Four Mile run, the new embankment gave way and caused a number of leaks at that point, rendering it necessary to make further and extensive repairs, requiring an additional expenditure of between 6,000 and 7,000 dollars, and causing a suspension of the navigation during the winter. For the purpose of making those repairs, the board, on the 3d of October, obtained from the common council a loan of \$4,000, and on the 28th of January the further sum of \$3,000. The work was completed about the first of March, and the canal from that time has been in good order, with a depth of water averaging about 5½ feet.

From a statement in paper marked A, of receipts and expenditures for the year, approved by the committee of stockholders, it will be seen that:

The balance in the hands of the treasurer on the 24th of April 1850, was	-	-	-	1,072 13
Receipts during the year, including \$38,000 received on account of loans authorized by the common council,				40,546 10
				<hr/> 41,618 23
Expenditures during the year,	-	-	-	41,588 26
				<hr/> \$ 29 97

(Say \$58 78, less \$28 81.)

Some small sums have been borrowed of individuals, and there are some outstanding debts due by the company. The statement in paper marked B will shew the *principal* sums due by loan and the other indebtedness of the company, at the time to which the statement of the affairs of the company is made up—25th day of April 1851.

Paper C, hereunto annexed, exhibits a detailed account of the transportation on the canal for the last year. So much of the year having been spent in making improvements and repairs on the Chesapeake and Ohio and the Alexandria canal, the latter has been navigable so short a time (only about 130 days,) that the receipts of toll have necessarily been very limited.

For a more particular account of the repairs and improvements made during the past year, and the present condition of the canal, you are respectfully referred to the report of the engineer, Mr. S. H. Williams.

The whole line of the canal is now in good order, the Maryland mining company's wharf completed, and the wharves of the Alleghany, Frostburg and Borden companies, sufficiently advanced for use. The wharves now constructed at the outlet of the canal will, if sea vessels can be procured with sufficient regularity to take the coal directly from the boats, accommodate the shipment of a quarter of a million of tons per annum.

The trade has opened this spring with receipts of 6,000 tons of coal for the month of April and upwards of 8,000 for May, with a prospect of a continued increase. We may therefore reasonably expect that the income from tolls and wharfages will soon extinguish our debt; after which, this work, involving so heavy an expenditure of money, and whose benefits have been so long delayed by causes beyond our control, will doubtless prove a source of income to its proprietors, and a busy channel of trade to our community.

By order of the board.

JOSEPH EACHES, *Pres.*  
*Alexandria Canal Company.*

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### ENGINEER'S REPORT.

*To the President and Directors Alexandria Canal Co.*

GENTLEMEN,

In my report of last year was exhibited the amount of work done, and to be done, in order to place the canal in a safe condition to admit six feet depth of water.

During the past year, the amount of work required for the accomplishment of this object has been done.

Throughout the line, from the aqueduct to the basin at Alexandria, the canal has been deepened wherever necessary and the embankments raised and widened.

Through the deep cuts a berm bank has been thrown up, with a ditch back of it, to drain off the water falling upon the slopes and adjacent grounds in time of rain, and to prevent the wash from flowing into the canal. A system of side drainage has been adopted, wherever practicable, and in part carried out, to prevent all future deposits from being formed in the canal bottom.

The difficulties encountered at the Four Mile run embankment, it is believed, have been overcome. The strengthening the banks on the outside by increasing the width and flattening the slopes, undertaken by Mr. James Roach, was completed in August last. This, however, was not found to give sufficient strength to the old banks to sustain the additional pressure from the increased depth of water. It was therefore found necessary to cut out a portion of the old embankment from the inside, and replace it with good materiel, carted, and spread in thin layers. This was done during the past winter, and found to answer the purpose. That portion of the new embankment which has continued to settle from time to time for want of a firm base, seems now to have reached a solid footing. There has been no perceptible movement since the latter part of winter. The remodeling of the spandrel backing and building cross walls over the arches of the road culvert at the Four Mile run, with other repairs, have cut off nearly all the leakage through the arches, and placed the work in a safe condition.

From a critical examination of the aqueduct recently made by Mr. Green and myself, we were unable to detect the appearance of recent decay in any of the main timbers. In several of the oak timbers decay was found, but its condition evidently indicates that it existed before the timbers were kyanized. Some of the middle string-pieces supporting the tow-path plank, and some of the plank themselves, will soon require renewing; and it may be necessary, at no distant day, to key up some of the segments on the berm side which have settled. In other respects the work is in good order.

I would respectfully urge upon the board the retention of a sufficient force upon the line to carry out the plans heretofore recommended for side ditching and slope protection, both through the deep cuts and over the embankments. The deepening of the canal and widening the embankments will have been done to but little purpose, unless the ditching and protection above referred to be thoroughly done and kept up.

All of which is respectfully submitted.

S. H. WILLIAMS, *Engineer.*

*May 31st, 1851.*

## [ A. ]

*Receipts and Expenditures of the Alexandria Canal Company, year ending April 25th, 1851.*

<hr/>					
aid:—Loans,	-	-	-	-	314 28
Incidental expenses,	-	-	-	-	426 51
Interest,	-	-	-	-	31 06
Officers' salaries,	-	-	-	-	550 00
General construction,	-	-	-	-	333 32
Repairs and superintendence,	-	-	-	-	34,172 04
Coal wharves for Md. mining company,	-	-	-	-	5,701 05
Balance in hands of treasurer of wharf fund,	-	-	-	-	58 78
Requisitions outstanding last year paid in this,	-	-	-	-	60 00
					<hr/>
					\$41,647 04
<hr/>					
received:—Loans,	-	-	-	-	34,450 83
Rents,	-	-	-	-	224 00
Tolls,	-	-	-	-	414 12
Repairs, &c., (sale of materials,)	-	-	-	-	7 00
Wharf loan from corporation Alexandria,	-	-	-	-	5,000 00
Sales of timber from coal wharf,	-	-	-	-	450 15
Balance due treasurer,	-	-	-	-	28 81
Due by treasurer last year,	-	-	-	-	912 45
“ “ “ wharf fund,	-	-	-	-	159 68
					<hr/>
					\$41,647 04
<hr/>					



## [ B. ]

*A Statement shewing the present indebtedness of the Alexandria Canal Company,  
April 25th, 1851.*

Principal debt due to the common council, on loans authorized by acts of the common council prior to the 12th of January 1849, as per statement (B,) in the years 1849 and 1850, - - - -	17,164 90
Loans from banks, guaranteed by the common council, as per statements in said paper (B,) - - - -	7,000 00
Loan authorized by the act of the common council, passed the 12th January 1849, - - - -	25,000 00
Loan authorized by the act of 16th Nov. 1849, - - - -	1,000 00
" " " " 15th Jan. 1850, - - - -	23,000 00
" " " " 30th Oct. 1850, - - - -	4,000 00
" " " " 28th Jan. 1851, - - - -	3,000 00
Amount loans from banks and common council, - - - -	80,164 90
Loan from T. W. & R. C. Smith, - - - -	213 45
" " Waters & Zimmerman, - - - -	773 10
" " Joseph Eaches, (temporary,) - - - -	150 00
	<hr/>
	81,301 45
Due to Lee & Johnston, for purchase of land, - - - -	186 66
" Robert H. Miller, " " - - - -	500 00
" James Green, - - - -	1,172 30
" Goodhand & Thompson, - - - -	200 00
" " " " - - - -	253 20
" John Moore, - - - -	76 50
" James A. English, - - - -	126 98
" laborers, - - - -	139 04
" officers and engineers, about - - - -	500 00
" Mrs. Hunter, - - - -	150 00
" Mrs. Swann, an unascertained balance, and to others some small amounts, say in all - - - -	250 00
	<hr/>
	<b>\$ 84,856 13</b>

## [ C. ]

*A Statement of the Trade on the Alexandria Canal, shewing the number of Boats ascending and descending, the kinds and quantities of Articles Transported, the ascending and descending Tonnage, the total Tonnage, and total amount of Tolls received from April 1850 to April 1851.*

## DESCENDING TRADE.

Bark,	-	-	-	-	306½	cords.
Wheat,	-	-	-	-	17,188	bushels.
Flour,	-	-	-	-	7,996	barrels.
Bran, shorts, &c.	-	-	-	-	2,700	bushels.
Corn,	-	-	-	-	32,995	"
Corn meal,	-	-	-	-	152	"
Flax and other seeds,	-	-	-	-	2½	"
Apples,	-	-	-	-	17	barrels.
Limestone,	-	-	-	-	950	perches.
Coal (to 1st of April,)	-	-	-	-	1,371½	tons.
Stone,*	-	-	-	-	100½	perches.
Sundries,	-	-	-	-	25	tons.

Number of boats 123, amount of tolls received \$ 251 34.

## ASCENDING TRADE.

Fish,	-	-	-	-	290	barrels.
Salt,	-	-	-	-	273½	tons.
Plaster,	-	-	-	-	853	"
Plank, laths and shingles,	-	-	-	-	108	"
Fresh fish,	-	-	-	-	348½	"
Sundries,	-	-	-	-	419½	"

Number of boats 134, amount of tolls received \$150 58.

Total amount of tolls received (deducting \$12 20 due from last year,) \$ 401 92.

Descending tonnage 4839; ascending tonnage 2038 tons; total amount of tonnage ascending and descending 6877 tons.

\* Besides 1620 perches on which the tolls had not been collected at the time of making up this statement.

*General Statement of the Receipts and Expenditures of the Alexandria Canal*

	PAYMENTS.		TOTAL.
	Before April 24, 1850.	Since April 24, 1850.	
General construction, - -	471361 92½	333 32	471695 24½
Potomac aqueduct, - -	575381 43½	-	575381 43½
Engineer department, - -	9867 24	-	9867 24
Pay of officers, - -	16544 40	550 00	17094 40
Incidental expenses, - -	4247 95	426 51	4674 46
Mechanics Bank, - -	285 00	-	285 00
Bank of Alexandria, - -	10000 00	-	10000 00
Interest, - -	2217 72	31 06	2248 78
Loans, - -	34000 00	603 40	34603 40
Discounts, - -	40648 50	-	40648 50
Capital stock, - -	45 82	-	45 82
Alexandria corporation stock, - -	195000 00	-	195000 00
G. H. Smoot, trustee, - -	3425 00	-	3425 00
Corporation of Alexandria, - -	50000 00	-	50000 00
Rents, - -	108 50	-	108 50
Repairs and superintendence, - -	20710 30	33882 92	54593 22
Capital stock held by company, - -	11725 00	-	11725 00
Coal wharf Maryland mining company, - -	9890 32	5701 05	15591 37
Profit and loss, - -	413 22	-	413 22
Due by treasurer wharf fund, - -	-	58 78	58 78
			<b>\$1497459 36½</b>

*Company from the commencement to the 25th April 1851.*

	RECEIPTS.		TOTAL.
	Before April 24, 1850.	Since April 24, 1850.	
Capital stock, - - -	380026 60	-	380026 60
Corporation of Alexandria, - -	350000 00	-	350000 00
United States, - - -	400000 00	-	400000 00
Unclaimed balances on pay rolls, -	71 87	-	71 87
Withers & Wilson, - - -	6 81	-	6 81
Bank of Alexandria, - - -	10000 00	-	10000 00
Premiums on treasury notes, &c. -	3512 57	-	3512 57
Mechanics Bank, - - -	285 00	-	285 00
Interest, - - -	12812 25	-	12812 25
Loans, - - -	66164 90	34450 83	100615 73
Chesapeake and Ohio canal company, -	19909 26	-	19909 26
Alexandria corporation stock, -	195000 00	-	195000 00
Potomac aqueduct, - - -	3062 75	-	3062 75
Rents, - - -	1230 00	224 00	1454 00
Tolls, - - -	4712 64	414 12	5126 76
Miscellaneous, - - -	76 43	7 00	83 43
General construction account, -	11 98	-	11 98
Wharf loan, - - -	10000 00	5000 00	15000 00
Coal wharf account, - - -	-	450 15	450 15
Balance due treasurer, - - -	-	28 81	28 81
Requisition outstanding, - - -	1 42	-	1 42
			<b>\$1497459 39</b>

*Memorandum of the views of the Alexandria Canal Company, as at the time of the last Annual Report, 25th of April 1851; now made up agreeably to the Formula accompanying the Circular of the Board of Public Works, under date of 1st September 1851.*

General construction.	-	-	471,623 26½	Capital stock, -	-	630,000 00
Potomac aqueduct.	-	-	572,312 62½	United States,	-	400,000 00
Engineer department,	-	-	9,467 24	Unclaimed balances on pay rolls,	-	71 87
Pay of officers,	-	-	17,094 40	Withers & Wilson,	-	6 81
Incidental expenses,	-	-	4,674 46	Premium on treasury notes,	-	3,512 57
Balance of interest and discounts,	-	-	30,025 03	Loans,	81,012 33	
George H. Sinnot,	-	-	3,425 00		229 12	
Repairs and superintendence,	-	54,593 22				81,301 45
		229 12		Chesapeake and Ohio canal company,	-	19,909 26
Capital stock held by the company,	-	-	54,222 34	Rents, excess of receipts over payments,	-	1,345 50
Coal wharf for Maryland mining company,	-	-	11,770 82	Tolls,	-	5,126 76
Profit and loss.	-	-	15,141 22	Miscellaneous,	-	83 43
Cash in the hands of the treasurer,	-	-	413 22	Requisition outstanding,	-	1 42
	-	-	29 97	Apparent excess of stock as reported last year,	-	26 60
			<u>\$1,191,385 65½</u>			<u>\$1,191,385 67</u>

*Alexandria, Oct. 15, 1851.*

**R. JOHNSTON, Clerk.**

*A List of the President and Directors, Officers and Agents of the Alexandria Canal Company, with the Salary or Compensation of each, Oct. 15, 1851.*

NAMES.	OFFICERS.	COMPENSATION.
Joseph Eaches, -	President, -	\$ 300 per annum.
Anthony P. Gover, -	Directors, -	Nothing.
James Green, -		
Wm. L. Powell, -		
Henry Daingerfield, -		
Louis A. Cazenove, -		
William Gregory, -	Clerk, -	\$ 200 per annum.
Reuben Johnston, -	Treasurer, -	50 "
Washington C. Page, -	Engineer, -	No fixed compensation.
Samuel H. Williams, -	Sup't Northern division, -	\$ 450 per annum.
Wm. B. Chew, -	Superintendent Southern di-	
Patrick Gallagher, -	vision, lock keeper and col-	
	lector of tolls, -	\$ 450 per annum.

R. JOHNSTON, *Clerk.*

## CHESAPEAKE AND OHIO CANAL COMPANY.

OFFICE CHES. AND OHIO CANAL CO.  
*Frederick, June 2d, 1851.*

To the Stockholders Chesapeake and Ohio Canal Co.

GENTLEMEN,

The report of the president and directors, presented at your meeting on the 27th February last, brought the affairs of the company down to that period, and the statements of the clerk and treasurer, accompanying that report, exhibited the revenues and expenditures of the company, together with the transportation upon the canal for the year ending the 31st of December 1850. It remains for us then to communicate to you the subsequent proceedings of the company, and to express such views in regard to its future prospects as circumstances would seem to warrant.

In conformity to the recommendation contained in a resolution passed at your last meeting, the board have appointed Charle B. Fisk, Esq. general superintendent of the canal, and have conferred upon him such authority over the subordinate officers on the line of the canal as will, it is believed, give an efficient organization to this important branch of the service. In this connection we would also state that we have adopted a system of by-laws, rules and regulations for the government, and prescribing the duties of the various officers connected with the management and preservation of the canal, and the collection of tolls. We have every reason to believe, as far as we can judge from the short period which has elapsed since the by-laws of the company went into operation on the first of April last, that very beneficial results have and will attend them—in the preservation of the works of the company—in securing a proper vigilance and subordination on the part of the officers on the line of the canal, and producing a degree of order and regularity on the part of those navigating the canal, which has heretofore not existed. Although, as was to be supposed in any new system of regulations, some opposition would in the outset be manifested by those to whom any restraint would be irksome, we have reason to believe that all well disposed persons engaged in navigating the canal regard these regulations as wholesome and necessary, acting both as a protection to the works of the company, ensuring more regularity and less frequent interruptions to the navigation of the canal, and at the same time preventing collisions with some of the boatmen, who have hitherto been disorderly. Under all circumstances, there has been less objection than could have been expected, and the boatmen have very generally quietly acquiesced in, and readily complied with the provisions of the regulations. But few infractions have been reported by the officers on the line of the canal, and the amount of fines imposed under them have been \$140—of which \$80 have been remitted by the board for sufficient causes stated—\$50 have been collected, and \$10 remain uncollected.

The stockholders at their last meeting also passed a resolution recommending the board to appoint a committee for the purpose of in-

vestigating a claim preferred by Messrs. Hunter, Harris & Co., late contractors for the completion of the canal to Cumberland, for services rendered and sacrifices sustained by them under their late contract. In accordance with this resolution a committee, consisting of Charles B. Fisk, Esq. chief engineer, Wm. A. Bradley, Esq. and Dr. S. P. Smith, directors, was appointed; but these gentlemen having other indispensable engagements, have not yet taken the matter into consideration or reported upon it, nor, as we learn, have they been furnished by the parties with any data upon which to make the proposed investigation.

The water was withdrawn from the canal during the month of February, for the purpose of removing some deposits and making other repairs preparatory to the opening of the spring trade, and was readmitted in the early part of March, and the navigation of the canal resumed throughout its entire length by the 17th of March. It has since continued in good navigable condition without interruption, with the exception of a few days at two points where small breaches occurred, and one or two other points where leaks were discovered and the water withdrawn for a day or two as a precautionary measure. The trade on the canal was not, however, retarded to any injurious extent, and a great degree of regularity in the navigation has been maintained. The depth of water in a large portion of the canal is six feet; but on some few levels it is thought advisable not yet to admit more than five feet water until the embankments are raised and some deposits removed, which are now in progress. We confidently expect, when the canal shall be opened for navigation next season, that six feet water may be safely maintained throughout its entire length. Boats now navigate the canal drawing 4 feet 1 inch of water; and with this draft the largest class of boats are taking from 100 to 110 tons of coal from Cumberland to tidewater. The draft of boats next season will probably be increased to 4 feet 6 inches or more; and as each inch added to the draft increases the tonnage about three tons, they may then carry 120 tons or upwards.

To provide against any deficiency of water on the new portion of the canal above dam No. 6 during the season of drought and low water in the Potomac, and to ensure an adequate supply of water at all seasons for any amount of transportation that could be anticipated on the canal, it has always been contemplated to introduce as a feeder the South branch of the Potomac. In the estimates for the completion of the canal to Cumberland this was not included or provided for, under the impression that it would not be required by the trade for some years after the completion of the canal, and that the feeder from the Cumberland dam would be sufficient for a gradually increasing transportation until the revenues of the company would be adequate to the expenditure required. From indications of the extreme drought the last season, and a probably augmented trade, it has been deemed advisable, with a view to give every possible assurance of uninterrupted navigation at all seasons, to anticipate the original design regarding the proposed additional feeder. With this object, application was made to the legislature of Virginia at its last session to



company to an amount not exceeding  
 the South branch improvement,  
 both of the company and the state of  
 . We regret, however, to say that

then directed to another mode of  
 object, by the chief engineer, at  
 than the proposed feeder from  
 would in all respects be preferred, but  
 movement, once commenced upon that  
 continued to such extent as its ca-  
 valuable trade would be brought to  
 . The plan proposed by the chief  
 be propelled by steam, placed at  
 No. 6 and Cumberland ; which, he  
 its efficiency, and if adopted will  
 as that may now exist in regard to  
 water for the upper portion of the ca-  
 want of trade that the canal may be  
*2. even with double locks."*

es would not require an expenditure  
 be found that \$ 60,000 would be suffi-  
 of water at seasons of the greatest  
 of these pumps would not be required  
 ege. than two or three months in the  
 ight ; and that when not required for  
 power could be applied advantageously  
 ing the expenses of maintaining it  
 s recommendation, and are now endea-  
 means for carrying it into effect at as  
 . The chief engineer's report on the sub-  
 . . . . . marked A.

ave been continued with as little inter-  
 eticable, and are now so far advanced  
 urative security against encroachments  
 several points, which have heretofore  
 trust by the close of the present year,  
 epleted as to leave but little apprehen-  
 the works and the maintenance of unin-

by the Board of public works of Virginia  
 arising from the sale of the bonds of  
 ars, and guaranteed by that state, to a  
 yonac aqueduct, has been so far relaxed  
 below the aqueduct ; and the expendi-  
 consequently been strictly confined to re-  
 owe that point. The other means of the  
 efficient to enable them thus far to make  
 that point, embracing the basin at George-

The corporation of Washington have passed an act authorizing an advance to the company of a sum not exceeding \$3,000, on the bond of the company, payable at its pleasure, with interest payable semi-annually, for the purpose of cleaning out a channel in that portion of the canal lying between the Rock creek and Tiber tide locks. This arrangement was agreed to on the part of the company, and a contract made for the purpose with William Easby, who has thus far executed rather more than a moiety of the work. When it shall be completed there will be sufficient water for boats of the greatest draft navigating the canal to pass readily into the Washington canal.

Under the act of the state of Virginia of the 15th March 1849, authorizing the guarantee of that state on the bonds of the company to an amount not exceeding \$200,000, for repairs of the canal below dam No. 6, the whole amount has been issued and guaranteed, consisting of 140 bonds of \$1,000, and 120 bonds of \$500, all made payable in the city of Baltimore on the 1st July 1869, with interest coupons attached, payable semi-annually, on the 1st of January and July of each year. Bonds to the amount of \$184,000 have been sold, realizing a premium of \$394 83. The amount paid out by the superintendent for repairs from this fund to this time is \$174,123 82, leaving in bonds and money \$26,271 01 still unexpended. The whole amount will be required for repairs, which are deemed essential for the security and preservation of the canal.

The trade upon the canal during the present season compares very favorably with any former year, in the leading articles of transportation; but we regret to say that in the article of coal there has so far been less transported than we were induced to expect from the representations of the various mining companies. This, in part, may be owing to the want of a sufficient number of boats on the opening of the canal; and as they are gradually increasing the number we confidently hope, before the close of the present year, that a greatly augmented trade will result from it. Comparing the trade upon the canal, from the 1st of January to 31st of May, for the years 1850 and 1851 respectively, it will be seen that a gratifying increase, both in the articles transported and the tolls accrued, has been realized. It is proper, however, to state, that in this period of the former year the canal was navigable for 2½ months only, whilst in the present year it was navigated 3½ months.

*Articles transported on the Chesapeake and Ohio Canal.*

From 1st January to 31st May 1850 :

Flour,	-	-	-	-	-	138,930 barrels.
Wheat,	-	-	-	-	-	58,800 bushels.
Corn,	-	-	-	-	-	32,280 "
Coal,	-	-	-	-	-	807 tons.
Total articles ascending,	-	-	-	-	-	8,821 tons.
Total articles descending,	-	-	-	-	-	32,083 "
Tolls accrued,	-	-	-	-	-	<u>\$26,724 71</u>

From 1st January to 31st May 1851 :

Flour,	-	-	-	-	-	134,220 barrels.
Wheat,	-	-	-	-	-	97,320 bushels.
Corn,	-	-	-	-	-	138,360 "
Coal,	-	-	-	-	-	20,319 tons.
Total of all articles ascending,	-	-	-	-	-	9,192 tons.
Total of all articles descending,	-	-	-	-	-	59,620 "
Tolls accrued,	-	-	-	-	-	<u>\$ 44,106 41</u>

The statements of the treasurer of the receipts and expenditure from the 1st of January to 31st May will be found in the Appendix, marked B and C.

Under the regulations for navigating the canal, we have required that all boats employed in transportation be duly registered at the office of the company, and to this period registers have been issued to 154 boats, as follows :

Classes A and C, decked and undecked boats, carrying 100 tons and upwards,	-	-	-	-	71 boats.
Classes B and D, decked and undecked boats, carrying less than 100 tons, say 60, 70, 80 and 90 tons,	-	-	-	-	72 "
Class E, scows,	-	-	-	-	7
Class F, boats designed for temporary use,	-	-	-	-	3
Steam tug boat,	-	-	-	-	1
Total number registered,					<u>154 boats.</u>

This would shew a great deficiency of boats for an extended coal business ; and we cannot but repeat the hope, that from the high rates of transportation paid, and the constant occupation which may be given, strong inducements will exist with capitalists to engage in boating ; and that before the close of the present year a much larger number may be added. The number of new boats added to the canal, to this time, consequent upon the opening of the coal trade, is about 78, nearly all of the largest class.

The mining companies of Alleghany, having represented to the board that it was indispensable for an enlarged and successful prosecution of the coal trade that some reduction should be made in the tolls on coal, to enable them to establish a market for their coal and compete successfully with other coals in the eastern ports, where the great demand for it was to be looked for, met the board and Maryland state agents, by appointment, on the 27th of November last ; and on representations then made a resolution was passed, on condition of a satisfactory guarantee being given by said companies for the transportation of not less than 300,000 tons of coal or coke during the year 1851 for the entire distance between Cumberland and Georgetown, the rate of toll for said year would be fixed at three mills per ton per mile ; and that on acceding to the above proposition,

if said companies would give a further guarantee for the transportation of not less than 600,000 tons of coal or coke during the year 1852 for the entire distance between Cumberland and Georgetown, the rate of toll for said year would be fixed at two mills per ton per mile. This, it was understood at the time, would be satisfactory to the several mining companies then represented; but not having complied, a further conference was held on the 8th and 9th of January last, at the request of these companies, when it was stated that they had been unable to procure guarantees for the full amount of 300,000 tons, proposed to be guaranteed for the year 1851, but that with a few weeks' delay they believed a guarantee of 500,000 tons, at two mills per ton per mile, for the year to commence on the 1st of July 1851, could be effected with less difficulty. The board deeming it advisable to commence the coal trade as early as practicable on an enlarged basis, and considering the large expenditure required for boats and fixtures for so extended a trade giving assurance of a continued increase, with the approbation of the Maryland state agents, passed a resolution assenting to the modification as proposed, provided that said guarantees were effected within thirty days from that time. On the 27th of February following, the gentlemen representing the mining companies again met the board by appointment, and admitting their inability to procure the guarantees of tonnage proposed in the resolutions of the 27th of November and 9th of January last, suggested in the event of certain reductions of toll being made, that they would invest large sums in boats and equipments for the transportation of coal. This being the only assurance that could be given, and the board deeming it necessary that some definite action should be had on the subject, with a view to the establishment of the coal trade at as early a period as practicable, rescinded the resolutions of the 27th of November and 9th of January, and fixed the rates of toll on coal and coke, to take effect on the first day of April last, at two and a half mills per ton per mile, without further condition; this, with the present charge for toll on the boat, ascending and descending, will be equivalent to 54½ cents per ton from Cumberland to tidewater. It is understood that this rate is satisfactory to the several mining companies; and we trust that they will, with as little delay as practicable, carry into effect their views of enlarged and constantly increasing transportation, as alike essential to their own interests as to the interest of this company.

We have also, with the assent of the Maryland state agents, made some reduction in the rates of toll on a few other articles, as calculated to increase the revenues of the company by an increased transportation of the articles in question—which we conceive to be the true principle upon which our rates of toll should be regulated; and in view of recent reductions of transportation upon other works, which may conflict with or withdraw trade now established upon the canal, it may become necessary, for our own protection, that some further modification of the rates of toll should be made. This will receive our early attention.

It has been alike the policy and anxious desire of this company to avoid all unfriendly collisions and injurious rivalries with other com-

... has hitherto been to avoid ... however we may have ... in some instances misrep- ... as injury—relying as we have ... of the great trust committed to ... when the resources of the ... full action, that the anxious an- ... period attended it, would not be ... the rates of toll on coal we have ... tions than such as were designed ... the great coal interests of the Alle- ... promotion of the interest of this com- ... fully established, the rates of toll ... consideration and arrangement to suit the ... exist. We can have no apprehension ... extent, in the transportation of coal on the ... In the first place, there will be sufficient ... trade shall be fully developed ; secondly, ... railroad must necessarily be compar- ... and at the present rates of charge, if not ... that company, cannot be profitable.

... 1849, statement K, shews a comparison be- ... seven of the principal railroads of the United ... equipment, charge for transportation, and ... per ton per mile.

... transportation of the Baltimore and Ohio rail- ... ton per mile. This for the length of their ... Cumberland—179 miles—would make the ... 88 cents per ton. Their present charge on ... which would shew an apparent loss of 67 cents ... sported ; and this view is further corroborated ... leading railroad company—a road of the first ... track, constructed expressly for the transporta- ... adapted for large trains, and a gradual incli- ... respects far better suited for the transpor- ... Baltimore and Ohio railroad, and with coal trains ... those of the Baltimore road are adapted to ... as large.

... the cost of transportation of coal can be ... cost of transportation on other articles ; when ... of the road from the heavy coal trains passing ... used for its transportation are for the greater part ... of an ascending or western transportation, ... the large outlay required for machinery con- ... of coal on the railroad, and, as we have ... ameration, if not actual loss, to the railroad ... station, we cannot suppose that they will be ... it beyond the quantity now taken of about ... an—amount so very small in comparison ... capacity of the great coal region of Alleghany, ... developed, as in our opinion to admit of no rivalry

with the great capacity and comparative cheapness of canal transportation. The mining companies of Alleghany have recently adopted an arrangement, as we understand, to deliver coal by the railroad at Baltimore, predicated on a charge of \$2 per ton for transportation to that city, at \$3 75 per ton; and at Alexandria, with the present high rates charged for freighting in consequence of the scarcity of boats, at \$3 37½ per ton—leaving a difference in favor of Alexandria of 37½ cents per ton. The result then of this arrangement would be, that coal would be shipped from Alexandria at 37½ cents per ton less than from Baltimore, that the canal company would realize a profit of 54½ cents per ton for toll, and that the Baltimore and Ohio railroad company would lose 88 cents on each ton of coal transported. Is this then a state of things likely to endure, or from which rivalry is to be apprehended?

In conducting the affairs of this company we are governed by no local considerations, excepting so far as they will subserve the great interests with which we are charged; and desirous as far as practicable to contribute to the state of Maryland some remuneration for the great sacrifices she has sustained in fostering and conducting to completion this great work, we look with earnest hope to its speedy realization. As connected in an essential degree with its future prosperity, we trust the time is not distant when the original design of the state of Maryland will be carried into effect, in its connection with the city of Baltimore by a lateral or cross cut canal from the District of Columbia.

It is in this connection only, we believe, that the city of Baltimore can participate to the extent and with the advantage which her position entitles her to expect in the great mineral resources of Alleghany. This connection effected, the canal will then become emphatically the great Maryland improvement, as from the large interest owned by the state it justly should be. Having both its eastern and western terminus within the state, and conciliating and binding together important interests which have hitherto been hostile, its triumphant success could no longer be doubtful.

At the present rate of toll upon the Chesapeake and Ohio canal, and some reduction from the present charge for freight, which will necessarily occur when a greater number of boats shall be placed upon the canal and the trade becomes fully established, coal could be carried from Cumberland to Baltimore at \$2 per ton, including a toll of 20 cents per ton to the proposed lateral canal, which, on 1,500,000 tons, (no unreasonable quantity to anticipate in the course of a few years,) would yield \$300,000 per annum on coal alone, more than sufficient to pay an interest on the cost of the proposed canal; but to this must be added the transportation of many other articles paying a higher rate of toll, both ascending and descending, which would doubtless be more than sufficient to pay all the expenses of management, and keep in good condition the proposed canal, estimated at \$600 per mile per annum, which exceeds the cost of maintaining the Chesapeake and Ohio canal since its opening to this time, including all expenditures for repairs, &c. In view then of the great advantages

to enure both to the state of Maryland and the city of Baltimore from this proposed connection, we trust that an early and vigorous effort will be made by the enterprising citizens of Baltimore to realize the benefits of it.

The trade upon the Chesapeake and Ohio canal, exclusive of the coal trade, will, it is believed, be amply sufficient to keep the canal in good condition and pay all the expenses of its management, leaving the revenues to be derived from the coal trade to be appropriated in the first instance to the liquidation of the priorities for which they were pledged, and such surplus as may remain to the payment of advances heretofore made by the state of Maryland.

A committee was appointed at your last meeting to ascertain and report upon what terms and arrangements the office of the company could be removed from Frederick to Washington or Georgetown. The corporations of each of these cities have promptly tendered to the company suitable apartments for their office, and we have this day passed an order accepting from the corporation of Washington rooms in the city hall at Washington, to which place the office will be removed as early as practicable. These apartments afford a secure depository for the valuable records of the company; and this location of the office at the eastern terminus of the canal, where its business is chiefly concentrated, will greatly facilitate the business operations of the company in its immediate connection with the line of the canal, as well as accommodating persons having business with the company. Its present remote situation from the scene of its active operations has for some time past been found very inconvenient, and this would continue to increase with the augmentation of business.

By order and in behalf of the board.

SAMUEL SPRIGG,  
*Pres't of the C. & O. C. Co.*



## APPENDIX.

## [A.]

*Report of the Chief Engineer on the Supply of Water above Dam No. 6.*

CH. ENG. OFF. CHES. & OHIO CANAL CO.  
Cumberland, April 29th, 1851.

To the President and Directors Chesapeake and Ohio Canal Co.

GENTLEMEN,

The application of this company to the legislature of Virginia, at its recent session, for a guarantee by that state of not exceeding \$150,000 of the company's bonds, to be applied to the construction of an auxiliary feeder to the new line of canal between dam No. 6 and Cumberland, having been rejected, I beg leave to submit, for the consideration of the board, a plan by means of which that portion of the canal can be fully and adequately supplied with water—even with double locks in constant use, night and day, throughout the entire year—and at a less expenditure than would be required to obtain such supply upon any other plan that has yet been suggested. This plan was briefly explained to you at your last meeting.

If I could have anticipated that the state of Virginia, interested as stockholder in the company to the amount of \$250,000, and having already guaranteed its bonds to the amount of \$500,000—with the canal, a work that has cost \$11,000,000, passing its entire length, and for a distance of 184 miles, along the northern boundary of the state, and at its eastern terminus connecting, by means of a lateral canal, with tidewater at Alexandria, within her borders—would have refused the guarantee asked of bonds that under the act of Maryland authorizing the completion of the canal would have taken precedence of the \$1,700,000 of bonds issued for its completion, as well as of all the liens of the state of Maryland—and that would only have been secondary to liens having priority not exceeding in all about \$310,000; in other words, that would be, as regards security, the same as if the entire canal, including \$150,000 for the South branch feeder, had only cost \$460,000—if I could have anticipated, I say, that the state of Virginia, thus situated in regard to the canal, and interested in its prosperity, would have refused to guarantee



bonds so well secured, when the object to be gained, at no cost to her, if the nett revenues of the company should amount to only \$27,600, per annum, was a navigable feeder, within her territory, that would connect with the Chesapeake and Ohio canal, and extend, by means of canal and slackwater navigation, up the rich valley of the South branch, to a point eleven miles above the mouth of that stream, (measuring by its meanderings, although the distance would be shortened by a cut across a bend of the river, to six miles,) and which navigation, at any future time, at an inconsiderable cost, might be extended still further up that valley, to its intersection with the Parkersburg road, and even much farther—I should long since have proposed the plan, for securing to the canal a sufficiency of water, that I now submit. It is a plan that I have, for a long time, had under consideration, as one to be recommended to the company for adoption, in case Virginia should refuse as she has done to aid by her guarantee in the construction of the South branch feeder. I speak of this to shew that any opinions I may now express in relation to this matter have not been hastily and without due deliberation formed. The plan may be fully relied on for its efficiency, and if adopted will remove forever all the apprehensions that may now exist in regard to the sufficiency of the supply of water for the upper portion of the canal at all times and for any amount of trade that the canal may be made capable of accommodating *even with double locks*. Indeed, but for the advantages that would ultimately, if not immediately, result to the canal company, in the way of trade from the South branch feeder, the plan for obtaining water, now proposed, would be in every respect preferable to any heretofore suggested.

The feeder at Cumberland, for the greater part of *every* year, will furnish all the water that the fifty miles of canal down to dam No. 6 requires. And, in many years, there would be no deficiency of water, for a limited trade, on that portion of the canal without any auxiliary feeder. I would here remark, that upon the opening of a new canal, that runs through a slate formation, as does much of the line between dam No. 6 and Cumberland, the loss of water, at first, from *filtration*, is very great; that this loss, even if nothing is done to check it, in the course of a few years becomes greatly and materially less—but with a comparatively small expenditure in the way of lining with water tight materials, it may soon be made as little as that on canals constructed with materials of the most favorable and suitable character. Of this we have evidence in the case of the new canal below Cumberland, as the quantity of water now lost by filtration upon it is less than two-thirds of what it was when the canal was filled last fall.

In extremely dry seasons the feeder at Cumberland, if not competent, as it will not be, to supply the entire fifty miles of canal down to dam No. 6, will be adequate to supply a portion of that distance. As the water in the river lessens, the distance that can be supplied will gradually and in like proportion lessen. For a time, this distance will not be less than forty miles. Later in the season, as the deficiency of water increases, this distance may lessen to thirty miles—

and still later to twenty miles—but it will rarely, if ever, judging from present appearances and the best information we can obtain bearing upon the subject, be as little as ten miles.

Now, the plan proposed is, by means of pumps, to elevate from the river, along side of the canal, at as many points as may be desirable, just as much water, and no more, as the wants of the canal, in dry seasons, may from time to time require. To do this, I would divide the fifty miles of canal between dam No. 6 and Cumberland, into five divisions, that are as nearly equal in length as practicable; and would place at the upper end of each of the four lower divisions an engine and pumps of sufficient power and capacity to raise from the river into the canal as much water as the divisions immediately below them may respectively require. This would reduce the length of canal that must be supplied by the feeder at Cumberland in extreme droughts to ten miles.

It may be well to remark, in this connection, that at a very small cost, the water of Evitt's creek, which enters the river three miles below Cumberland, the natural flow of which during the extremely dry season of 1838, was equal to 42 locks full of water per day, should it ever be desired, can be introduced into the Cumberland level of the canal, on the upper division, and be made as available to the canal as if it were introduced through the Cumberland feeder.

By thus supplying the deficiency of water in dry seasons, by pumps stationed at *four* points instead of at *one*, several advantages would result; one of which would be, that the quantity of water required at each point being only *one-fourth* of what it would be if all the water were to be obtained at one point, there would always be an ample supply of water at command—as from all the evidence we have, there is never flowing in the river at the three lower sites for the pumps, less than three times the quantity of water that can ever be required to supply ten miles of canal; and at the fourth site, which is the upper one, there is always an excess of water, although not as great as at the sites lower down the river. As the distance from Cumberland increases, the quantity of water in the river also increases, with every additional stream that enters; for instance, at the South branch, 20 miles below Cumberland, there was three times the quantity of water in the Potomac, in the extreme drought of 1838, that there was at Cumberland.

Another advantage that would result from obtaining the deficiency of water at four points in place of one, is that in case of a breach on either of the upper divisions, all the other divisions can be kept full and in readiness for a resumption of navigation as soon as the breach is repaired; whereas otherwise, all the divisions below the breach would be cut off from their supply of water during the repair, and be draining off by leakage and filtration, and might thus be put in such condition as to require much time for refilling.

The *first* point, below Cumberland, at which I propose placing an engine, is immediately below lock No. 72, not far above Patterson's creek.

The *second* point is directly below lock No. 68, opposite the mouth of the South branch.

The *third* is immediately below lock No. 61, about two miles below the tunnel.

And the *fourth* point is just below lock No. 58, about two and a half miles above the mouth of the Fifteen Mile creek.

It happens favorably for this plan of obtaining water, that the levels into which the water will be delivered by the pumps are all of great capacity and of large water surface, which will allow of occasional interruption or cessation of the working of the pumps for slight repairs, without interfering with the navigation; and as there will be a large portion of each year when the machinery will not be at all in use, none other than slight repairs ought ever to be required during the dry season of the year; and to guard still further against any interruption to the navigation while repairs are making, there may be at each station two, three, or even more smaller pumps, in place of one large one, which would admit of the others continuing in operation, while any one of them is stopped for repairs.

The following table shews the length of each division, the elevation that the water is to be raised at each point where an engine is stationed, the cubic contents and area of water surface of each division when filled to the full depth of six feet; also, the length of each level of the canal into which the water is to be delivered, and the cubic contents and area of water surface of each of these levels.

POINTS AT WHICH WATER IS TO BE ADMITTED.	No. of division.	Length of divi- sion.	Height to which water is to be raised.	OF WHOLE DIVISION.		LEVEL UPON WHICH WATER IS TO BE ADMITTED.		
				Cubic contents.	Area of water surface.	Its length.	Cubic contents.	Area of water surface.
				<i>cubic feet.</i>	<i>superficial feet.</i>			
Lock No. 58—two and a half miles above Fifteen Mile creek, - - -	1	9 miles. 4297 (9.81)	19.75	18,868,072	3,721,364	4 miles. 3615 (4.68)	7,238,283	1,488,212
Lock No. 61—two miles below the tunnel, - - -	2	8 miles. 5209 (8.99)	23.60	18,081,247	3,942,241	3 miles. 2167 (3.41)	6,368,734	1,451,688
Lock No. 68—opposite the mouth of the South branch, - - -	3	11 miles. 3782 (11.72)	18.50	26,274,928	4,847,126	3 miles. 717 (3.14)	11,029,263	2,103,673
Lock No. 72, - - -	4	9 miles. 3931 (9.74)	22.50	17,137,243	3,314,164	7 miles. 3015 (7.57)	13,501,686	2,586,909
Cumberland, - - -	5	9 miles. 5271 (10.00)	-	21,751,803	4,491,266	8 miles. 4754 (8.90)	19,867,421	4,113,678
		50 miles. 1370 (50.26)	-	102,113,293	20,316,161			

The power and capacity of the engines and pumps should be, in my opinion, sufficient to secure an average delivery of at least 1,500 cubic feet at each point, or 6,000 cubic feet at the four points per minute, night and day, and for a continuous period of not less than four months each year. Pumps of somewhat less capacity might answer, especially in view of the fact that the slate portions of the canal are becoming tighter, and will ultimately require much less water than they do at present; but as the arrangements and machinery for obtaining any less quantity of water that we might now reasonably and safely calculate upon, as being sufficient at all times and in all seasons, and for a maximum trade to supply the canal, would not be much less costly than those that would furnish the quantity above proposed, I think it by all means advisable that the larger quantity should be provided for. Besides, there is an advantage in having machinery competent to deliver into the canal considerably more water than is just equal to the loss from leakage, and filtration and lockage—as it may occasionally occur during the dry season, that a level has to be drawn down and subsequently refilled; and wherever this happens, by having the excess of water that machinery of the capacity proposed would furnish, such refilling could be soon accomplished, and there would be but little time lost to the navigation.

The cost of the machinery, fixtures and other works necessary for obtaining the quantity of water proposed, will depend upon the kind of engine and pumps that may be adopted for raising the water. I am not prepared, at this time, to present an accurate estimate of this cost, nor have I yet even decided in my own mind, what particular kind of engine and pumps I would recommend for adoption. Steps, however, have been taken for obtaining immediately all the information necessary for arriving at a correct decision upon this point, and to the making of accurate estimates of cost. If a committee were appointed with authority, subject to the approval of the board, to adopt such plan of machinery, &c. as might be found, upon further examination and investigation, best suited to the purpose, and to arrange for its construction, time might be saved, and it might be practicable this season to have one or more of the engines in operation.

From the information I already have upon the subject, there is reason to think that the engines and pumps at the four stations may all be constructed and put in operation for a sum not exceeding \$84,000; and it may be found that \$60,000 is sufficient to accomplish all that is deemed.

The cost of working the pumps per annum also depends somewhat upon the kind that may be adopted, and it *materially* will depend upon the length of time each year that it will be necessary to keep them in operation.

There will be years, as already stated, when the Cumberland feeder is adequate to supply the entire fifty miles of canal down to dam No. 6. In such a year there will be little or no expense, except the interest upon their cost, chargeable upon the pumps. There will be other years when that feeder will supply all but ten miles of the fifty. In such a season there will be occasion to work only one of the engines

and pumps for one, two or more months, while the deficiency of water continues. In some years it will be necessary to have only two engines and pumps in operation; in some three, and in others, four engines and pumps; and, again, in one season the continuance of the deficiency of water may be for only one or two months—in another it may be for three or four months. Under these circumstances, it is impossible now to say what the average expense per annum of working the pumps will be. Of one thing, however, I feel confident, and that is, that the interest of the cost of constructing and putting in operation the engines and pumps, added to the *average* cost of working them per annum, will not exceed the interest in the estimated cost of the South branch feeder added to the average cost of its maintenance per annum. Before the arrangements are finally concluded I shall be able to speak somewhat more definitely upon this subject; but for the reasons I have stated, it must be apparent that perfect certainty in regard to a matter of this kind is in the nature of things impossible.

The plan of feeding the canal above dam No. 6, heretofore thought of, looked to the construction, ultimately, of *two* intermediate feeders between that dam and Cumberland, viz: the South branch feeder and a dam (No. 7) across the Potomac, with a feeder from it, of some three miles in length, that would enter the canal a short distance below the tunnel. The latter feeder, it has been thought, would not be required for many years; but whenever it should be, (supposing this plan of feeding the canal adhered to, as its cost would be fully equal to that of the South branch feeder,) it would be found that this plan of supplying the canal with water was far more expensive and costly than that now recommended—as engines and pumps of the power and capacity above proposed would furnish more water to the canal at the points where the deficiency will exist than both those feeders.

There is another advantage in favor of the plan of obtaining water by pumps. The two intermediate feeders, just spoken of, from the South branch, and at dam No. 7, would leave at all times 18.14 miles of the canal dependent upon the Cumberland feeder, whereas, upon the plan now proposed, only ten miles would be thus left dependent. This is a very important advantage, as all the lockage water for boats leaving and arriving at Cumberland has to be obtained from the feeder at that place, leaving for the other feeders below, so far as these boats are concerned, no duty to perform.

I think it decidedly for the interest of the company, if the means can be obtained, that all four of the engines and pumps should at once be taken in hand and be put in readiness for operation. But, if means cannot readily be obtained for the four, I think no effort should be left untried to have at least two of them put up at as early a day as practicable.

With two engines in readiness for operation, the probability of there being a deficiency of water this season would be greatly lessened. Another season, however, I do not think should be allowed to pass without having provision made for supplying the canal with water to the full extent above recommended.

In conclusion, I would remark, that the engines and buildings may be so constructed that during those portions of the year when they are not required for the company's purposes, they may be rented and used for manufacturing purposes.

Respectfully submitted.

CHARLES B. FISK,  
*Chief Engineer.*

[ B .]

*Total Expenses of the Chesapeake and Ohio Canal Company from the 1st of January to 31st of May 1851.*

	Construction.	Repairs ordinary.	Repairs gen'l under Va. act.	Pay of superintendents, collectors and lock-keepers.	Aggregate.
1851—January, - -	-	4664 28	2951 77	1512 42	9128 47
February, - -	-	3786 68	5003 90	1512 45	10303 03
March, - -	1247 55	5000 45	3088 00	1529 28	10865 28
April, - -	-	4151 75	2648 35	1551 63	8351 73
May, - -	391 12	3846 03	2841 83	1545 80	8624 78
	\$1638 67	21449 19	16533 85	7651 58	47273 29

Add:

Pay of officers, - -	-	-	-	1,368 00	
Interest, - -	-	-	-	53,557 63	
Postages, - -	-	-	-	49 67	
Law expenses, including standing counsel, - -	-	-	-	82 16	
Contingent expenses, - -	-	-	-	303 40	
					55,360 86
					<u>\$102,634 15</u>

L. J. BRENGLE,  
*Treasurer and Account't C. & O. C. Co.*

*Treasurer's Office, Frederick, June 4, 1851.*



# Abstract of Receipts and Disbursements of the Ohio Canal Co., from Jan 1st to Dec 31st 1851.

The receipts from the following sources:

## Tolls.

Water rent  
 Rents of houses and lands  
 Bonds for repairs guaranteed by Virginia  
 Premium on bonds sold,  
 Interest accrued on do.  
 Fines and penalties,

Balance from 31st of December 1850,

The following are charged as follows:

51 14  
 33 20  
 20 64 60  
 60 00  
 42 56  
 50 00  
 -----  
 62,678 73  
 16,044 36

Construction for repair ordinary.  
 Repairs general under Va act.  
 Interest account,  
 Coupon interest account,  
 Engineer department,  
 Postages,  
 Law expenses,  
 Contingent expenses,  
 Pay of officers,  
 Incidental damages,

In banks, &c.

\$ 78,723 09

32,831 61  
 13,300 00  
 2,300 00  
 13 13 00  
 3 00 00  
 10 07  
 1 00 00  
 5 00 00  
 3,910 00  
 31 00

101,001 39  
 10,401 77

\$ 78,723 09

Treasurer's Office Ches. and Ohio Canal Co., Frederick, June 2, 1851.

L. J. BRENGLE, Treasurer.

## DISMAL SWAMP CANAL COMPANY.

DISMAL SWAMP CANAL COMPANY,  
*Norfolk, Oct. 22d, 1851.*

W. R. DRINKARD,  
*Sec'y to Board Public Works.*

SIR,

I herewith enclose the documents (\*A to E) called for by your circular received at this office on the 3d inst., which will be found to embrace the operations of this company for the fiscal year ending with the 30th of September.

I am, most respectfully,

Your ob't serv't,

JAMES CORMICK,  
*Pres't D. S. C. Co.*

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[ A.]

*Report of the President and Directors of the Dismal Swamp Canal Company to the Board of Public Works.*

The directors of this company herewith enclose such documents marked (A to E) as in their judgment will comply with the requisition of the circular received at this office on the 3d inst., from W. R. Drinkard, secretary to the Board of public works. In presenting the general condition of their company with the enclosed documents, the directors deem it entirely sufficient to say that the important improvements which had just been completed at the time of their last annual report have answered their most sanguine expectations, and have proved amply sufficient to discharge the surplus water of the heaviest floods that have ever visited those works, and that the increased number of recesses, and the thorough cleansing of the canal when emptied last fall, have given every facility to navigation upon the canal that can be reasonably desired or expected. Although the summer and fall have been unusually dry, no detention or obstruction of navigation has been at any time experienced.

This work, like all others of a similar character, is subject to great annual expense in repairing, natural decay, keeping up embankments and turnpike road, (on the eastern side,) as it is a well known fact to

- \* A. Report of the president and directors.
- B. State of the company's affairs,
- C. Receipts and expenditures and list of officers and servants, and their salaries.
- D. List of stockholders.
- E. Produce passing through the canal, and tolls collected.

most of the members of your board that earth for this purpose has to be lightered from a distance of several miles, as no such material can be obtained in the Dismal swamp along the line of the canal.

A rapid and cursory enumeration of some of our operations will give a good idea of the whole, viz: at Gilmerton piles have been driven and a bridge constructed 80 feet long outside the locks, at the same point a number of piles have been driven to secure the wharfing, and many more at the Deep Creek locks. We have used the spare gates to change and rehang the gates at Gilmerton to guard against the ravages of worms, from which the works have in former times severely suffered. All of the draw dridges, the levers to all the lock gates, and the upper works of the waste weirs have been thoroughly painted; much of the wharfing near the villages of Deep Creek and South Mills has been renewed and the banks strengthened; many shoals have been dredged out, and four new sets of gates and levers have been constructed and hung during the past year, so that all the gates have been renewed in the last two or three years.

We would state that the tolls will fall short of our expectation, chiefly on account of the short crop of corn in North Carolina: last year 1,315,142 bushels passed through the canal, but this year only 341,632 bushels. There was also a short quantity of fish in North Carolina this year, viz: 30,149 barrels. For several previous years, from 39,000 to 47,000 thousand barrels passed through the canal. Fish and corn are two of the great staples from which tolls are derived.

There is one subject of deep importance to all who are interested in the navigation of the canal, to which we beg leave respectfully to call the attention of your board.

The Pasquotank river is the southern outlet of the canal, and for the distance of ten or twelve miles is crooked beyond all description, and so narrow and full of snags and shoals as to be one of the most vexatious causes of complaint from all who navigate this river and enter the canal.

From a recent examination it appears that this tedious and laborious route of ten or twelve miles can only be avoided by cutting three and a half miles across the land, from a point below and near the south locks to a point below on said river. This cut will be through a dense cypress swamp, which is inundated a greater portion of the year.

It must be made at considerable cost and of sufficient depth and width for vessels to pass each other at all stages of the water, which is frequently elevated or depressed at least two feet by the operation of the winds. This great improvement has for several years engaged the attention of the directors, but they knew it would be attended by great cost; and they have been moreover constrained to apply their resources to objects within the immediate limits of the company's works, hoping that the general or state governments would improve the river navigation.

The directors confidently believe that this improvement would be

utmost importance to the trade of the canal and to the commercial and agricultural community. If neither the state nor general government will do it, we are confident that the company must apply its own resources to effect so desirable an object at no very distant

inclusion, the directory will add, that the works of the company be in such order as to invite the personal inspection of the members of the Board of public works at their earliest convenience.

Respectfully submitted.

JAMES CORMICK, *Pres't*,  
GEORGE McINTOSH,  
HENRY B. REARDON,  
RICH'D DICKSON,  
JOHN TUNIS.

## [ A.]

*State of the Dismal Swamp Canal Company on the 30th September 1851.*

Capital stock paid in, viz:			
By the state of Virginia, 760 shares,	-	-	190,000 00
By the United States, 800 "	-	-	200,000 00
By individuals, 384 "	-	-	96,000 00
Par \$ 250. 1944			<u>486,000 00</u>
Due by the company:			
To W. B. Selden's estate, for funded loan, redeem- able 15th May 1852,	-	-	15,000 00
To the United States for dividends, &c., in account,	-	-	9,470 13
To dividends unclaimed, viz:			
Amount from the commencement,	-	170,100 00	
" paid "	-	168,437 50	
		<u>1,662 50</u>	
			<u>26,132 63</u>
Contingent fund, for contingencies:			
Amount of profits transferred from the year 1850,	-	19,242 21	
Amount, less supplied to cover improvements,	-	1,461 20	
		<u>17,781 01</u>	
Profit and loss:			
Balance on 30th September 1850,	-	43,522 21	
Surveying compass sold,	-	20 00	
To dividend No. 8, 5 per cent. declared Nov. 18th.	24,300 00		
To transfer to contingent fund Sept. 30, 1851,	19,242 21		
	<u>\$ 43,542 21</u>	<u>43,542 21</u>	
Amount of tolls 12 months,	-	40,712 16	
To current expenses, -	-	5,009 13	
General expenditures,	-	4,705 91	
Discount and interest,	-	750 00	
Balance or nett profit 12 months,	-	247 12	
	<u>\$ 40,712 16</u>	<u>40,712 16</u>	<u>30,247 12</u>
			<u>\$ 560,160 76</u>

## [ B.]

*The Company's Canal and Appurtenances.*

Cost of the whole work up to 30th Sept. 1844,	1,112,323 71		
and improvements since, to 30th Sept. 1851,	38,473 93		
Cost from commencement,	-	1,150,797 64	
Deduct income up to the 30th Sept. 1844,	592,323 71		
some received from the U. S.	37,012 73		
some supplied from con't fund,	1,461 20		
	<u>38,473 93</u>		
Income from commencement,	-	630,797 64	
Stand to the company,	-	<u>520,000 00</u>	
Land estate purchased, the title to which is not	-		
fully acquired,	-	-	176 30
Investment of surplus funds in 11 Virginia state	-		
bonds, bearing interest at 5½ per cent. of	-		
\$1,000 each,	11,000 00	cost	10,084 00
Due to the company in available funds:			
the Exchange Bank of Virginia, Norfolk,	-	12,995 87	
Bank of Virginia,	-	24 89	
Farmers Bank of Virginia,	-	15,584 31	
Collector of tolls,	-	1,286 61	
Cash account,	-	8 78	
		<u>29,900 46</u>	
			<u>\$ 560,160 76</u>

[ C.]

*Operations of the Company during the year ending 30th September 1851.*

Balance on hand 30th September 1850,	-	-	24,949 47	
Receipts since :				
From tolls twelve months,	-	40,712 16		
From United States, dividend No. 8 credited in account,	-	-	10,000 00	
From sale of compass,	-	-	20 00	
			<u>50,732 16</u>	75,681 63
Expenditures since :				
Amount paid for keeping canals in order,	-	-	4,705 91	
Amount paid for salaries, wages, &c. :				
For president, twelve months,	-	750 00		
For treasurer, "	-	200 00		
For manager, "	-	600 00		
For collector of tolls, "	-	750 00		
For assistant "	-	250 00		
For two lock-keepers, " at \$ 300,	-	600 00		
For one lock-keeper, "	-	240 00		
For four lock-keepers, " at \$180,	-	720 00		
For one lock-keeper, "	-	168 00		
For one lock-keeper, "	-	144 00		
For one keeper of culvert,	-	30 00		
For two assistant lock-keepers, at \$120,	-	240 00		
For one " "	-	108 00		
		<u>4,800 00</u>		
Paid for incidental expenses,	-	209 13		
			<u>5,009 13</u>	
Dividends,	-	-	24,103 75	
Improvements,	-	-	2,167 38	
Interest,	-	-	750 00	
United States dividend No. 7,	-	-	9,000 00	
$\frac{1}{2}$ per cent. on \$ 9,000 for specie,	-	-	45 00	
			<u>45,781 17</u>	
Amount of available funds,	-	-	-	<u>\$ 29,900 46</u>

A. FERET, Treasurer.

*Office of the Dismal Swamp Canal Co., Sept. 30, 1851.*

## [ E.]

*Tolls of the Dismal Swamp Canal and Road, received at the Toll Office of the Company.*

## DISMAL SWAMP CANAL.

## INWARD.

3,298	bales cotton, at 20 cents,	-	-	-	659 60
30,149	bbls. fish, at 6½ cents,	-	-	-	1,884 31
32,883	" naval stores, at 6½ cents,	-	-	-	2,055 19
206	" spts. turpentine, at 12½ cents,	-	-	-	25 75
4	" flour, at 10 cents,	-	-	-	40
266	" spirits, at 12½ cents,	-	-	-	33 25
1,799	cwt. bacon, at 3 cents,	-	-	-	53 97
855	kegs lard, at 3 cents,	-	-	-	25 65
341,632	bushels corn, at ¾ cent,	-	-	-	2,562 24
113,497	" wheat, at 1½ cent,	-	-	-	1,702 45
22,346	" peas, at 1 cent,	-	-	-	223 46
537	" beans, at 1½ cent,	-	-	-	8 05
5,913	" flaxseed, at 1½ cent,	-	-	-	88 70
8,788	" potatoes, at ¾ cent,	-	-	-	65 91
	Sundries,	-	-	-	200 78
No. 1—Total inward toll,					<u>\$ 9,589 71</u>

## LUMBER.

199,911	cubic feet timber, at ¾ cent,	-	-	-	1,499 33
383,762	" plank and scantling, at 1 cent,	-	-	-	3,837 62
364,030	pipe staves, at \$1,	-	-	-	564 03
8,834,660	hhd. " at 75 cents,	-	-	-	6,626 00
460,800	bbl. " at 75 cents,	-	-	-	345 60
3,514,540	long shingles, at 70 cents,	-	-	-	2,460 18
4,449,610	two feet shingles, at 37 cents,	-	-	-	1,646 35
35,945,610	building shingles, at 15 cents,	-	-	-	5,391 84
30,140	garden pales, at 70 cents,	-	-	-	31 10
25,800	fence rails, at \$2,	-	-	-	51 60
1,000	coopers' bolts, at \$5,	-	-	-	5 00
204,930	" staves, at 70 cents,	-	-	-	143 45
4,988	cords of wood, at 12½ cents,	-	-	-	623 50
	Sundries,	-	-	-	106 67
No. 2—Total lumber toll,					<u>\$ 23,322 27</u>

## OUTWARD.

44	qr. casks of wine, at 28 cents,	-	-	-	12 32
4,056	bbls. spirits, at 12½ cents,	-	-	-	507 00
3,384	" pork, at 12½ cents,	-	-	-	423 00
9,304	" flour, at 10 cents,	-	-	-	930 40
555	" fish, at 6½ cents,	-	-	-	34 69
384	" bread, at 6½ cents,	-	-	-	24 00
102	" beer and cider, at 8 cents,	-	-	-	8 16
678	" sugar, at 12½ cents,	-	-	-	84 75
130	hhd. " at 50 cents,	-	-	-	65 00
1,008	" molasses, at 32 cents,	-	-	-	322 56
147	" spirits, at 50 cents,	-	-	-	73 50
1,337	bags coffee, at 8 cents,	-	-	-	106 96
17,511	cubic feet dry goods, at 3 cents,	-	-	-	525 33
1,558	boxes hats and shoes, at 12½ cents,	-	-	-	194 75



1,237 boxes soap and candles, at 2 cents,	-	-	-
1,389 kegs of nails, at 4 cents,	-	-	-
185 " powder, at 4 cents,	-	-	-
211 crates ware, at 25 cents,	-	-	-
230 casks cheese, at 8 cents,	-	-	-
3,480 " lime, at 6½ cents,	-	-	-
63,727 bushels salt, at 1 cent,	-	-	-
134 5-20 tons iron, at 70 cents,	-	-	-
534 boxes tobacco, at 8 cents,	-	-	-
2,469 tons " at 20 cents,	-	-	-
Sundries,	-	-	-

No. 3—Total outward tolls, - - -

### NORTHWEST CANAL.

#### INWARD.

35 bbls. fish, at 2½ cents,	-	-	-
48,266 bushels corn, at ¼ cent,	-	-	-
77 " wheat, at ½ cent,	-	-	-
18 " peas, at ½ cent,	-	-	-
59 " flaxseed, at ½ cent,	-	-	-
192 " potatoes, at ¼ cent,	-	-	-
60,606 cubic feet timber, at ¼ cent,	-	-	-
4,552 " plank and scantling, at ½ cent,	-	-	-
806,550 hhds. staves, at 25 cents,	-	-	-
118,750 bbls. at 25 cents,	-	-	-
252,600 long shingles, at 23½ cents,	-	-	-
229,500 two feet shingles, at 12½ cents,	-	-	-
781,670 building " at 5 cents,	-	-	-
18,640 garden pales, 23½ cents,	-	-	-
1,200 fence rails, at 62½ cents,	-	-	-
10,580 coopers' staves, at 23½ cents,	-	-	-
2,437 cords of wood, at 4 1-6 cents,	-	-	-
Sundries,	-	-	-

Total inward toll, - - -

#### OUTWARD.

191 bbls. spirits, at 4 1-6 cents,	-	-	-
246 " pork, at " "	-	-	-
326 " flour, at 3½ cents,	-	-	-
36 " bread, at 2½ cents,	-	-	-
41 " sugar, at 4 1-6 cents,	-	-	-
23 hhds. molasses, at 11 cents,	-	-	-
36 bags coffee, at 2½ cents,	-	-	-
690 cubic feet dry goods, at 1 cent,	-	-	-
27 boxes hats and shoes, at 4 1-6 cents,	-	-	-
42 " soap and candles, at ¾ cent,	-	-	-
49 kegs nails, at 1½ cent,	-	-	-
12 casks cheese, at 2¾ cents,	-	-	-
115 " lime, at 2 1-12 cents,	-	-	-
1,615 bushels salt, at ½ cent,	-	-	-
2 3-20 tons iron, at 23½ cents,	-	-	-
15 boxes tobacco, at 2¾ cents,	-	-	-
Sundries,	-	-	-

Total outward toll, - - -

Total inward toll, - - -

No. 5. Total Northwest canal tolls, - - -

RECAPITULATION—*Fiscal year 1851.*

	-	-	-	-	-	9,589 71
1. Inward toll,	-	-	-	-	-	23,322 27
2. Lumber "	-	-	-	-	-	5,957 09
3. Outward "	-	-	-	-	-	1,004 60
4. Road "	-	-	-	-	-	838 49
5. Northwest canal tolls,	-	-	-	-	-	
Total amount canal tolls,						<u>\$ 40 712 16</u>

LEROY G. EDWARDS,  
*Collector of Tolls D. S. Canal Co.*

## DRAGON SWAMP NAVIGATION COMPANY.

*To the Board of P. Works of Virginia.*

GENTLEMEN,

In performing the duties enjoined on us by the legislature, we have to report that there has been an entire suspension of the operations of the Dragon swamp navigation for some years; that we have consequently nothing to add to our former reports, to which we ask a reference.

Respectfully submitted.

THOS. W. FAUNTLEROY,  
*President D. S. N. Co.*

THOS. B. EVANS, *Treasurer.*  
Nov. 27, 1851.

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## GOOSE CREEK AND LITTLE RIVER NAVIGATION COMPANY.

*Second Annual Report of the President and Directors of the Goose Creek and Little River Navigation Company.*

*To the Board of P. Works of Virginia.*

GENTLEMEN,

I have the honor to transmit herewith the report of the treasurer of this company, exhibiting a statement of its fiscal affairs up to 30th September 1851.

Since my last report the work has been steadily though slowly prosecuted. It would have been completed long since had funds been at our command which would have justified putting on it a large force. We have deemed it more prudent to delay its completion rather than embarrass the company by urging it on beyond our ability to meet our engagements with the contractor. By the last estimates of our engineer the amount of work done by the contractor will by this time probably reach the sum of \$54,000. A reference to the treasurer's report will shew that he has received on account thereof \$41,482 91. So far as the work has been completed, we entertain the belief that it is not surpassed by any similar improvement in the state. Owing to the heavy expenses we have been compelled to incur in order to give that degree of strength and solidity to the locks and dams which was deemed indispensable to their durability, and which was not attainable under the original plans and specifications, we shall not be

able to complete the entire line of improvement without additional individual subscriptions. So soon as our engineer shall have leisure to prepare a correct map of the improvement, a copy shall be forwarded to the Board of public works.

Respectfully submitted on behalf of the directors.

H. B. POWELL,  
President G. C. & L. R. N. Co.

Middleburg, Oct. 3d, 1851.

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*Return of the Goose Creek and Little River Navigation Company, from the Commencement of the Work to September 30th, 1851.*

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Capital stock, (authorized by charter,) \$ 100,000:*		
Subscribed by individuals 513 shares, at \$ 50 each,	-	\$25,650 00
Subscribed by commonwealth 769½ shares, at \$ 50 each,	-	\$38,475 00
Amount of commonwealth's subscription unpaid,	\$8,105 37	
Amount of individual subscription unpaid,	5,403 58	
Expended in construction of work from the commencement to March 31st, 1849, to date, for salaries, surveys, constructions and miscellaneous expenses,	47,311 74	
Cash on hand September 30th, 1851, as per statement below,	3,304 31	
	<u>\$64,125 00</u>	<u>64,125 00</u>

*Statement of Receipts and Expenditures for same time.*

For capital stock—amount received from individuals,	-	20,246 42
“ “ “ “ “ Board public works,	-	\$30,369 63
Total receipts,		<u>50,616 05</u>
Deduct disbursements, viz :		
For construction of work, (to contractor,)	-	41,482 91
salaries of engineers from 1849 to date,	-	3,953 33
salary of clerk and treasurer for two years,	-	600 00
expenses of surveys, including hire of hands and cost of instruments,	-	762 54
damages to Mavin's and Davis's mills,	-	400 00
miscellaneous expenses,	-	112 96
		<u>47,304 74</u>
Balance of money on hand,	-	<u>\$ 3,304 31</u>

B. P. NOLAND, Clerk and Treasurer.

October 2d, 1851.

\* Only a portion of the capital stock authorized has been taken.

† I have received no notice that the Board of public works has subscribed for more than 600 shares—but presuming it has, I so treat it.

‡ I have not yet heard from our president's last draft on the Board of public works for \$3,002 25, but have assumed it in this statement to be paid.

## GUYANDOTTE NAVIGATION CO.

## REPORT OF THE PRESIDENT AND DIRECTORS.

*To the President and Directors of the  
Board of Public Works.*

GENTLEMEN,

In addition to the very general report heretofore presented to you, I have the honor to submit a further and more particular report in relation to the improvement of the Guyandotte river.

Having made some preliminary arrangements, the company was organized and commenced operations in the latter part of June last. Owing to the want of facilities in the country for such an enterprise, the difficulties in procuring mechanical labor and reliable workmen, and the scarcity and high price of provisions in that particular section, the operations of the company were not only considerably retarded, but rendered more expensive in the commencement than they would have been under ordinary circumstances. The very low stage of water in the Guyandotte during the summer, while it favored the operations of the company in locating their locks, at the same time rendered it impossible to raft their timber from the most favorable points up the river, where it would have been procured at comparatively cheaper rates, and made it necessary to purchase the same in localities nearest the locks and dams, whence it could be most economically drawn by ox teams to the places where used.

I deem it proper to advert to these facts to shew, that while the works have been prosecuted, as the directors hope, with diligence and economy satisfactory to the Board of public works, yet they will be found to have been somewhat more expensive than was at first estimated by the company. It should also be borne in mind, that not only have heavy expenditures been incurred to overcome the difficulties above referred to, but in addition thereto comparatively large sums have been expended in purchasing tools, cooking utensils, camp furniture, teams, wagons, and pile-drivers, which will not again be incurred in the further prosecution of the work. It is also proper to state, that the low stage of the river, before mentioned, prevented the company from availing themselves of transporting materials and provisions by water, and that the want of roads rendered this also an important item of expense. In this connection, also, it is deemed proper to advert to the objections of Mr. Gill to the plan of constructing the works, adopted by the directors. The unavoidable delay occasioned by the investigation of those objections, on the part of the Board of public works, occasioned great inconvenience. Besides being crippled in their resources, the confidence of the public was for a while shaken in the success of their enterprise, and the directors in consequence subjected to the mortification of being deserted by many of the workmen at the very season when their services were most profitable to the company, and when vexatious delays and no incon-

siderable expenses were necessarily incurred in recruiting their force. For the time, also, this state of things produced a partial insubordination among the laborers who remained, and weakened the influence of the superintendent and principal workmen over those under their immediate charge. The direct loss from these causes was by no means inconsiderable. It is matter of satisfaction, however, that the course of the directors has been, upon due consideration, approved by the Board of public works.

In prosecuting the works, the company determined, with a view to economy, expedition and fidelity in their construction, to exercise an immediate control over them instead of entrusting them under contract to others; they, therefore, engaged the services of Col. Cyrus Moore, who is also one of the stockholders, to take the general agency and oversight of the works, in the procurement of materials, men and supplies. They also employed Capt. George McDaniels as engineer, to plan and supervise the execution of the works. Several other intelligent and skillful mechanics were employed at two and three dollars per day to take the special charge of the portions of the work allotted to them.

The sites selected for the locks and dams have on one side of the stream a sand bank, with an intermixture of marl or clay; and on the other a rock or ledge, affording a perfectly secure abutment for one end of the dam. In every instance the lock is located on the weaker or more exposed side of the stream, and secured by substantial piers with sheet piling extending into the bank to a greater or less extent.

With these preliminary remarks, I beg leave to avail myself of an extract from the able report of Col. Charles B. Shaw, submitted to the Board of public works in October last, in relation to the works in question :

“The system of improvement proposed by Mr. Gill contemplated stone locks one hundred feet long between the gates, and twenty feet wide with a lift of eight feet; such locks, in favorable localities, could be built for his estimate, which is \$800 for the foot lift. The best materials on the Guyandotte for many miles from its mouth is a friable sandstone, easy to work, and consequently not very durable.

“On organizing for action, it became evident to the directors of this company that locks of that small size would be insufficient for the passage of coal barges suitable for freighting coal to Cincinnati; the Pittsburg boats being from 120 to 140 feet long, and carrying from eight to ten thousand bushels.

“The necessity for larger locks, the scarcity of good building stone, and the abundance of oak timber of excellent quality, induced them to substitute larger locks of wood. The form and construction of these I will presently describe.

“The dams were probably such as were contemplated by Mr. Gill, some of them only being higher with a view to reduce the number. They are substantial crib dams, the range timbers and ties being sound white oak, 16 inches in diameter at the small end; ties of the same large dimensions at every six feet; the whole well framed together and secured with treenails and iron bolts. The sheeting is:

of three inch oak plank, with tight water-joints, and the cribs are compactly filled with large and small stone. On hard foundations the lower range timbers are bolted down to the rock beneath with one inch round iron bolts, running two feet into the rock, the lower ends of the bolts being split and wedged at the bottom to prevent their drawing. On soft foundations a range of bed timbers is placed at a suitable distance below the bottom; upon these is spiked a plank apron to receive the overfall of the dam. Sheet piling of three-inch plank is driven in front of the apron to hard bottom, so as to prevent the undermining of the dam on the lower side. On the upper side, whether the foundation be hard or soft, the plank sheeting is driven down to hard ground, tongued and grooved, the tongues being driven into the grooves. All the plank piling, above and below the dam, at the heads and tails of the locks and lock-bottoms, aprons and lining of the chambers, are of three inch oak plank, with the same description of water joints, and as far as progressed in, are substantially and well executed.

“The locks are one hundred and forty-two feet long between the gates, and twenty-six feet wide. After excavation of the pits, lock-bottoms, with heavy white-oak bed timbers, are laid down, covered with three inch plank, and securely piled at the head and tail. Square upright posts are tenoned into the bed timbers the entire length of the chambers, and to them is affixed the plank lining. Externally, to these uprights are heavy piers for their support. These piers are crib work of five tiers of range timbers, parallel to the axis of the lock, connected like the dams, with ties at every six feet. They are perpendicular next the lock chambers, for the purpose of supporting the upright posts, the latter being treenailed to them. On the side next the river, they are perpendicular for five or six feet, and thence are battened to the top. The bottom thickness of these piers (or lock walls) is 20 feet; the top thickness 15 feet. They are filled like the dams, with stone, and are to be coped with three inch plank, water tight. The thickness of these piers renders wings unnecessary on the river side; on the land side, wings of the same construction are extended into the bank and secured with water-tight sheet piling in such manner as to effectually prevent the water from cutting around them. All percolation of water, either under the dams or locks, or around their abutments or wings, seems to be provided against. The breast of the locks is a similar crib filled with stone, and sheet piling above. A hollow framed chamber on a level with the upper side of the breast supports the mitre sill of the upper gates. This chamber is 9 feet wide, and extends across the breadth of the lock; it is well supported below on four rows of short upright posts, and communicates with the lock chambers. On the upper side it is planked over, and makes one surface with the top of the breast wall.

“There are two cast iron valves in this floor, next to the recess, and above the mitre sill, size three by four feet. There are also three other valves in each leaf of the upper gates, making altogether eight valves for filling the lock. The lower gates have but six valves; all these are turning valves, worked with wicket rods and cranks. The



ollow quoins are of wood. The quoin and toe posts, and transoms, as well as all the materials for the wood work of these locks and dams, being of the choicest round white oak, which is here abundant."

More particular information of the location and the present condition of the works will now be given.

Lock and dam No. 1 are one mile and a quarter from the mouth of the river, with the lock on the east or left hand bank, as you ascend the stream. The bottom of the rock rests upon a solid concrete foundation, and is about on a level with the bottom of the channel of the Ohio river at the mouth of the Guyandotte. This site was selected, both because the foundation at the mouth of the stream was found to be insecure, and because, could this difficulty have been obviated, the cost of constructing a lock and dam at the mouth would probably have been double that of the expense of the same at the site selected. It is presumed there will be no difficulty in keeping open a channel of sufficient depth to enter the lock from the Ohio at all seasons, when there is sufficient water in the Guyandotte above for the purpose of navigation.

The shore pier is one hundred and eighty feet long, extending some forty feet below the tail of the lock. It is to be twenty-three feet and eight inches high, and is already more than twenty-one feet high, and filled with stone. It is of sufficient width at the base to sustain the lateral pressure of the bank, and increases in width as it rises—the cross ties being driven into the bank, and the whole loaded with stone. At the head of the lock, this pier is well secured by strong sheet piling, with tongued and grooved three inch plank, driven in a line at right angles with the pier into the bank, above high water mark.

The stream pier is of the same length with the former, and to be of the same height. It is now twelve or fifteen feet high, and filled with stone. The chamber of the lock is wholly planked at the bottom, and on the sides somewhat more than half way up. The gates are framed, and ready to be put in.

The dam will be of easy construction, the foundation being good—partly a hard concrete, and partly a rock bottom. It will be about one hundred and eighty feet in length, from the outside of the stream pier to the western bank, which is a solid rock. It will be fourteen feet high, and in ordinary stages of water, with about ten feet head. In high water in the Ohio, it will be entirely submerged. The timber for the dam is about half of it on hand, and the balance can easily be procured from the river above, or from the immediate vicinity.

At this site the directors have secured by purchase, of Col. Everett, for the use of the company, about five acres of land on the east side of the river, between the Guyandotte turnpike and the river, including one acre of land on the east side of the turnpike, and also about two acres on the west side of the river, at the cost of four hundred and fifty dollars. This is regarded by the directors an important acquisition.

Lock and dam No. 2 are located just above the mouth of Mud river, and at the village of Barboursville, the county seat. The site is about



seven miles from the Ohio, and five miles and three-quarters above lock and dam No. 1.

The lock is here to be on the west or right hand side of the stream.

On the opposite side is a rock bank, from which, by blasting, stone can be conveniently obtained for loading the piers.

The dam at this place, outside of the stream pier, will be about 200 feet long, thirteen feet high, and with nine feet head. The works at this place have not been commenced yet, it having been deemed expedient to delay them for a while, with a view to economy in the purchase of timber and plank. These have recently been contracted for at reduced prices, which fully justifies this policy of the company. They will be forthwith begun and completed as soon as possible.

The directors are promised a sufficient quantity of land, at this site, for the uses of the company, without charge, and will take immediate measures to secure the grant.

Lock and dam No. 3 are located at the site of Dusenberry's mills, twelve miles and three-quarters from the mouth of the river, and between six and seven miles above lock and dam No. 2. This lock is on the west or right hand side of the stream, upon a rock bed which extends entirely across the river. The dam is now thirteen feet high, and built in the firmest manner, and can be raised the additional three feet with comparatively little cost. It will have twelve feet head. Its length is 208 feet east of the stream pier. On the east side of the river, at this place, are situate the mills of Mr. Dusenberry; and in order to secure effectually the dam, independent of the bulkhead of the mills, a strong pier, twenty-eight feet long and sixteen feet wide, has been built and raised above high water, and coped with heavy oak plank.

The shore pier is one hundred and eighty feet long, and twenty feet wide. It is to be twenty-two feet high, and is already finished at the head for about forty feet, while at the lower end it is raised about half way, and filled with rock throughout. This is connected to the bank at the head by a wing pier, eighty feet long and twenty-eight feet wide at the bottom, secured by strong sheet piling four inches thick.

The stream pier is of the same length as the former, and is twenty feet wide at the top and bottom; it is now some fifteen feet high and filled with stone. The lock is wholly planked at the bottom, and on the sides for sixteen feet up. All the timber requisite for the completion of the gates is got out and ready to be framed.

At this site the directors have already purchased two and a half acres of land on the west side for the uses of the company, for the sum of \$150, and they deem it necessary to make a further acquisition of some two acres of Mr. Dusenberry on the west side.

Lock and dam No. 4 are located about twenty-four miles from the mouth of the river, and nearly twelve miles above lock and dam No. 3. The lock is on the west or right hand side of the river. The dam will be sixteen feet high, with twelve feet head, and is already raised thirteen feet. The bed of the stream is a solid rock, except about twenty feet, which has been well secured by sheet piling, and an apron of sufficient length. The sheet piling here is of four inch

plank. The shore pier will be twenty-four feet high, and is already finished at the upper end for about fifty feet, while at the lower end it is raised half that height, and well loaded with rock. The stream pier is of the same height, and twenty feet wide. It is now up about twenty feet at the head, and from that to six feet at the lower end, and filled with rock. These piers are each one hundred and eighty feet long. The lock is planked at the bottom entirely, and at the sides about one-third of the way up.

This dam, from the east side of the stream pier to the east bank, is only one hundred feet in length; but in high water there will be on the east bank a waste way thirty or forty feet wide over a solid ledge of rock. During the freshet in November last, owing to an unseen defect in one of the sheet pilings, the water forced a passage round the shore pier on the west bank, washing out a channel over a rock dipping towards the bed of the river, in width about seventy-five feet. This accident, which at first threatened great injury to the works at this place, was one of no very serious consequence, as the damage sustained thereby, it is estimated, will be only about one thousand dollars. A wing pier will have to be built extending into the bank, which may be thus perfectly secured. The directors do not impute this accident to any neglect on the part of those having charge of the works.

Sufficient lands for the company's use are being negotiated for at this place, and it is expected will be secured for a reasonable amount in the course of a few weeks. The timber is on hand for the gates at this lock, and partly dressed; and the residue of the timber for the dam is also on hand.

Lock and dam No. 5 are located at the upper falls of the Guyandotte, nearly thirty miles from the mouth of the river. Originally, at this place, the river had a fall of about ten feet perpendicular over the lower end of a rock extending entirely across the bed of the stream. This rock dipped slightly to the east or left bank of the stream, and during a freshet some thirty or forty years ago, the river washed away the left bank, opening a new channel along the east side of said rock, leaving the same, in ordinary stages of water, entirely above the surface of the river.

At this site, the lock is placed in the present channel of the stream on the east side.

The piers at this place are of the same length with the former, already described, and will be twenty-three feet high.

The shore pier is up at the head, and about ten feet high at the foot, and loaded throughout with rock. From the head of this, there extends a winged pier, at right angles, to the east shore, ninety feet long at the top, and driven into the bank, and well secured by strong sheet piling. This wing pier is thirty feet wide at the bottom, and twenty-three feet at the top, and is raised some forty feet high, and is above high water, so as effectually to secure the bank from the action of the water. Great pains have also been taken for the same purpose, by brushing and graveling the bank on this side for a considerable distance up the stream above the pier.

[ Doc. No. 18.]

stream pier is up to the required height at the head, and about  
t at the foot, and is also well loaded with stone. From this  
ere is also extended, at right angles, a wing pier, about seven-  
ve feet, entirely across the present channel of the stream, and  
tting against the rock above described, which formed the ancient  
of the river. This wing is twenty-eight feet wide at the bottom,  
twenty-three feet at the top.

The lock at this place is wholly planked at the bottom, and at the  
to the height of about six feet.

ie dam extending from the west end of the wing pier, above  
tioned, across the said rock, will be two hundred feet long, and  
ut six feet high, and will be built at comparatively small expense,  
sidering its height, and the convenience of its construction over  
said table rock.

his is the upper dam in the course of construction by the compa-  
and it will render the stream navigable for somewhat more than  
the distance contemplated in their charter. It is the design of  
directors to finish the work thus far during the ensuing summer,  
then take immediate measures for the further extension of the  
works. For the locks except No 2, the castings are all provided  
and paid for; and considering the difficulties incident to the com-  
mencement of a work of this character, which have been already  
alluded to, the directors believe that this portion of the work will be  
more expensive than the upper or remaining portion of the improve-  
ment.

Since the date of the report, hereinbefore mentioned, the engineer  
has been necessarily absent from the works, in consequence of having  
received a severe injury in one of his legs. The superintendent, in  
the mean time, during the winter, has kept only a small number of  
hands at work, sufficient, however, to protect them from injury.  
These hands have been mainly employed in providing timber and  
blasting rocks, and filling in the piers. The engineer, however, has  
just returned to the service of the company, and, in conjunction with  
the superintendent, will vigorously press the works already com-  
menced to their completion.

In relation to the disbursements of the company, I beg leave to  
refer to the statement of the secretary, already presented, and which  
is again respectfully submitted.

The item of \$ 2225 for damages, in that statement, includes \$ 1500  
incurred for the destruction of a mill and mill site, between locks and  
dams No. 4 and No. 5. It is believed that the damages on the re-  
mainder of the line will be very small.

Since the date of the said statement, the company have received  
from the individual stockholders the sum of six thousand dollars, all  
of which has been expended in part payment of arrearages, and in  
meeting the current expenses of the company for hands employed  
during the winter, and for their subsistence. This \$ 6000, added to  
the amount exhibited in said statement, makes an aggregate of  
\$ 43,553 58, leaving the sum of \$ 31,446 42 remaining of the present  
capital of the company.

It is impossible to determine at this time precisely the cost of the works already commenced; but it is confidently believed that about three-fourths of the expenses have been incurred, and that therefore the whole amount will fall within the present capital of the company.

With respect to the importance of this improvement to the country, there cannot be a reasonable doubt. The investment of capital is developing immense stores of cannel and bituminous coal in the valley of the Guyandotte, as well as the rich iron ores of the same region, and cannot fail to stimulate every department of industry. The beautiful and extensive forests of timber will be cleared off, and open the whole region to the wool-growing and stock-raising interests, and thereby introduce other and profitable industrial pursuits. The navigation of the river being secured, it is believed that the salt deposits in this valley will also invite the investment of capital in the manufacture of that important article, and yield a profitable return. For these reasons, among others, it is believed that the capital expended in this improvement will prove a safe investment for the state, not only as yielding a good interest, but more especially as increasing her revenue, from the great enhancement of the real estate of the country.

The salaries of the officers of the board of directors have not, with the exception of that of the engineer and assistant superintendent, been definitely fixed, owing to a desire on the part of the directors to gain an expression of opinion in relation thereto from the stockholders. This has not yet been given. These salaries, however, the directors, in the absence of instructions, would have determined before this, but for want of a quorum at a meeting of the board, two of its members being in Richmond and one in New York. At the earliest moment, however, when a quorum can be had, the matter will be adjusted, the directors doubt not, to the satisfaction of all concerned.

The salary of the said assistant superintendent was fixed at thirty dollars per month, and he was honorably discharged in December last. It is believed that the like expense will not be again required, as the services performed by him can be hereafter rendered by the secretary of the company.

In conclusion, it is believed, that with the experience of the directors already acquired, and with prompt co-operation of the stockholders, the works already commenced may be fully completed during the ensuing summer, and profitable contracts made for the supply of timber and plank for the further prosecution of the improvement.

All of which is respectfully submitted.

On behalf of the board of directors.

PETER CLARK,  
*Prest. Guy. Nav. Co.*

*Guyandotte, March 18th, 1851.*

*Statement of the Treasurer of the Guyandotte Navigation Company, referred to in the foregoing Report, made Dec. 31, 1850.*

Capital stock, \$ 75,000:			
Subscribed by individuals,	-	-	30,000 00
Subscribed by the commonwealth,	-	-	45,000 00
Due the treasurer for money borrowed,	-	-	53 58
on book account for sundries,	-	-	9,207 76
Amount of commonwealth's subscription unpaid,	-	22,500 00	
" individual	-	15,000 00	
Expended in the construction of the work from the commencement, June 16, 1850, to Dec. 31, 1850:			
For outfitting, including cattle, tools, shanties, &c. for men, and keeping in working order,	-	-	4,252 91
For iron and steel,	-	-	1,844 31
feed for cattle,	-	-	1,022 98
powder,	-	-	453 42
lumber,	-	-	10,284 98
provisions,	-	-	4,765 37
labor, including salaries, so far as paid,	-	-	21,912 37
damages,	-	-	2,225 00
			<u>\$ 84,961 34</u>
			<u>84,961 34</u>

*Receipts and Expenditures.*

or capital stock received from individuals,	-	-	15,000 00	
or " " the Board of public works,	-	-	22,500 00	
or money borrowed from treasurer,	-	-	53 58	
			<hr/>	
Total receipts,	-	-	-	<u>\$ 37,553 58</u>
Deduct disbursements :				
or outfitting, including cattle, tools, shanties, &c. for men, and				
keeping in working order,	-	-	3,864 68	
or feed for cattle,	-	-	831 71	
Iron and steel,	-	-	1,556 40	
Powder,	-	-	453 42	
Lumber,	-	-	6,053 98	
Provisions for men,	-	-	4,387 58	
Labor,	-	-	19,664 12	
On account of damages,	-	-	50 00	
" officers' salaries,	-	-	691 69	
			<hr/>	
Total disbursements,	-	-	-	<u>\$ 37,553 58</u>

By order of the president and board of directors,

(Signed,)

D. B. TAYLOR, *Secretary.*

Engineer's salary \$1200 per annum—paid \$100 per month.

Superintendent,	}	Salaries not fixed.
Treasurer,		
Secretary,		

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*Officers.*

Peter Clark, president; Henry M'Farlan, Cyrus Moore, John W. Hite, Elisha M'Comas, James H. Ferguson, directors; Charles L. Roffe, state's proxy; Henry H. Miller, treasurer; David B. Taylor, secretary; Cyrus Moore, superintendent of the works; George M'Daniels, chief engineer.

[Dec. No. 18.]

**JAMES RIVER AND KANAWHA COMPANY.**

OFFICE JAS. RIVER & KANAWHA CO.  
Nov. 29th, 1851.

*To the Board of Public Works.*

The stockholders of this company having held their annual general meeting, I have the honor to transmit a copy of the president's annual report, with the accompanying documents, for the use of the board.

I am, very respectfully,  
Your ob't serv't,

J. Y. MASON, *Pres.*  
*James River and Kanawha Co.*

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**PRESIDENT'S REPORT AND DOCUMENTS.**

*To the Stockholders of the James River and Kanawha Co.*

GENTLEMEN,

The adjournment of your last general meeting took place on the 30th of January 1851. On the 1st day of February a resolution was adopted by the house of delegates of the legislature of Virginia, "requiring the president of the James river and Kanawha company to inform the house, as speedily as may be, of the causes of delay in the completion of the canal to the town of Buchanan." On the 4th day of February I addressed a communication to the honorable speaker of the house, giving the information required.\*

Nothing has transpired to induce me to change the opinions expressed in my communication. On the 31st of January there was submitted to the house of delegates a resolution directing the appointment of a special committee for the investigation of the affairs of this company in the particulars specified, which was adopted on the 12th of February. In my letter of the 4th of February I had declared, "I do not wish to be understood as wishing to avoid any investigation which the house of delegates may be pleased to institute. I have too much respect for that honorable body to object to its jurisdiction over any subject so deeply interesting to Virginia as I regard the concerns of the James river and Kanawha company's improvement to be, and too much confidence in its justice to doubt that honorable fairness will govern its enquiries, and that truth will be vindicated by its conclusions."

\* These documents were printed and bound with the last report, &c.



Acting on this principle, I called the executive committee together, which adopted proceedings, of which I annex a copy. [See House Doc. No. 71, hereto annexed.] These proceedings were subsequently confirmed by the board, and will satisfy you, I trust, that although the subjects embraced in the resolutions had been fully considered by the stockholders in general meeting, every facility was offered to the house committee in making the investigation required.

It will not be considered improper for me to state that I was not informed of the time or place of meeting of the committee, and had no communication from it subsequent to the date of the chairman's letter of the 15th of February, and have no knowledge of its proceedings and conclusions except that afforded in the public journals.

I communicate herewith House Document No. 71, which shews the reports from the committee and propositions from the house of delegates, when on the 29th of March the consideration of the subject was indefinitely postponed.

I make this proceeding a subject of my report, because I consider an important principle affecting the company involved, and because I wish the stockholders to understand the course which I deemed it my duty to pursue.

The James river and Kanawha company is duly chartered by the legislature of Virginia. The state owns three-fifths of the capital stock, and individuals and corporations own two-fifths. The charter prescribes the number of votes to which the state as a stockholder is entitled in the general meetings. By her proxies she attends and exerts the power to which she is thus entitled. And yet I have not questioned the jurisdiction of one of the houses of the general assembly to institute an examination into the company's concerns, even when the same subjects have been investigated and acted on by the stockholders with the aid of the state's proxies, because the state is largely interested in the work, and the general assembly may instruct the state proxies as to their course in casting the state's vote in general meeting, and under existing relations between the state and the company, has unquestionable authority to legislate in regard to many subjects of vital interest to the company, without at all interfering with the charter. I am persuaded, therefore, that the ready recognition of the right of the house of delegates to call for information and to investigate the affairs of the company, will not be regarded by the stockholders as a surrender of any right of theirs.

I propose to conform to usage, and arrange the subjects of this report under the heads of

- I. The condition of the work.
- II. The state of the finances.
- III. Other matters of interest concerning the condition and future prospects of the company.

#### I. THE CONDITION OF THE WORK.

I submit herewith the report of the chief engineer, giving information of the "operations of the department committed to his charge,"



[ Doc. No. 18.]

ted A. I commend to especial consideration the detailed information given of the various works of the second division of the improvement, extending from Lynchburg to Buchanan and to the gratifying account of the condition of those of the first division, extending from Richmond to Lynchburg.

The works of the company are :

1. The Richmond dock, and the connection of the basin with tidewater.
2. The canal from Richmond to Lynchburg.
3. The canal from Lynchburg to Buchanan.
4. The Blue Ridge turnpike and ferry.
5. The Kanawha turnpike road and river.
6. The third division or extension of water line from Buchanan to Covington.
7. The Rivanna and Southside connections.

1. *The Richmond Dock and the Tidewater Connection.*

You were informed in my last report that it would be indispensable to close the dock in the construction of the ship lock. This was done on the 1st May 1851. No revenue has been received from this source since, nor will any accrue until the works establishing the connection are completed.

The receipts during the fiscal year,	-	4,485 20
Expense,	-	969 89
		<hr/>
Nett revenue,	-	<u>\$ 3,515 31</u>

The works, to connect the canal with tidewater, consist of a series of locks and basins, extending from the main basin of the canal to the upper end of the dock, the enlargement and extension of the dock, and a ship lock connecting the dock with the river at Rocketts. These works are all in progress, and their speedy completion is of great importance to the revenues of the company, the business of the city of Richmond, and the trade and navigation of the canal, and of the lower James river. It will, I believe, prove of great value in contributing to promote a direct trade between the waters of James river and foreign countries, and in establishing the commercial independence of Virginia. The hope expressed in my last annual report, "that the connection between the canal and tidewater will be completed in the year 1851," cannot be realized. The board of directors, and the officers of the company, have exerted all their power to aid and compel the contractors to the completion of the work, according to the stipulations of their contracts. The report of the chief engineer will explain the causes of the delay. The contractor for the ship lock has nearly all his materials ready, and when he shall have overcome the difficulties of laying his foundation, the work will progress very rapidly. The narrow limits within which he has had to operate in laying his foundation has rendered it impossible to work a large force.

The other works on this connection will be completed, it is hoped, early in the ensuing season.

Of the funds appropriated to construction of these works, there remained unexpended on this object, at the end of the last fiscal year, one hundred and fifty-seven thousand one hundred and forty-eight dollars. This sum will be inadequate to their completion. The actual cost to the company of this part of its improvement, including the purchase and enlargement of the dock, and the disbursements for the complete construction of the connecting works, after deducting income heretofore received, will be more than five hundred and fifty thousand dollars. Of this sum, three hundred and fifty thousand dollars is due on company's bonds guaranteed by the state, bearing an annual interest of twenty-one thousand dollars, which is a charge on the general income of the company, arising from the finished works. The dock and tidewater connection, when completed, may be looked to for an amount of revenue, at least equal to the interest on the cost of construction and of purchase; thus relieving the other revenues of the company.

The great importance of these works, their heavy cost to the company, and the urgent necessity of deriving revenue from them at as early a day as possible, will constantly induce the board to use every exertion to complete them.

## 2. *The Canal from Richmond to Lynchburg.*

The experience of another year confirms the estimate of the great value of this section of the company's improvement, and strengthens the confidence in its stability. No breach worth reporting has occurred during the year. The repairs of defective locks have been systematically made, without any serious interruption of the navigation of the canal—and the entire line may now be regarded as in better condition than at any time since it was put into use.

The construction of a stone dam at Maiden's Adventure was let to R. L. More by contract, on the 20th of December 1849. Failing to perform the stipulations of his contract, the board were compelled to abandon it in the month of May 1851; and having received no satisfactory proposals, it has been determined to construct the dam on company account—the work will be vigorously prosecuted with the earnest desire to complete it in time for the low stage of water in the next season.

It will be borne in mind, that by an order made at your last general meeting, the fiscal year was made to end on the 30th of September, instead of the 31st of October. The revenues and disbursements of the current fiscal year, which will be found stated in this report and the accompanying documents, are confined to a period of eleven months.

The receipts from this division, for the last fiscal year,

are	-	-	-	-	-	-	\$ 222,113 57
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The disbursements for the same period, for repairs and

general administration,	-	-	-	-	-	64,146 78
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[ Doc. No. 18.]

Which shews an increase of receipts from tolls, over those of the same period in the preceding year, of	9,705 22
While the expenses are less by	7,578 30

The amount of tonnage transported in the year ending the 30th of September 1850, was	157,915 tons.
The tonnage for the year ending 30th of Sept. 1851,	174,615 "
Increase,	16,700 tons.

These statements shew a steady increase of income and of tonnage, notwithstanding the continued existence of causes which materially affect the business of the canal. No aid was derived from the Rivanna or Southside connections, nor from the plank road leading to Scottsville—the crop of tobacco was short—the iron interest has been and still is so depressed, that there is scarcely a furnace in full blast—and the price of wheat this season is so low that large portions of the crop are retained by the farmers for their own consumption, or with the hope of a more favorable market.

3. *The Blue Ridge Turnpike and Ferry.*

The receipts,	1,291 11
Expenses and repairs,	916 00
Nett income,	<u>\$ 375 11</u>

4. *The Western Improvements.*

I submit herewith, marked B, the annual report of Ezra Walker, Esq., the excellent agent on the western improvements.

The receipts for the fiscal year, from the Kanawha road, are	7,536 00
Disbursements,	8,227 71
Excess of disbursements over receipts,	<u>\$ 691 71</u>

Receipts from the river,	9,714 86
Disbursements,	4,152 52
Nett income,	<u>\$ 5,562 33</u>

The condition of this account is satisfactorily explained in Mr. Walker's report. The heavy extraordinary expenses for durable bridges on the turnpike road, have absorbed and exceeded the income for the last three years. These structures are now completed, and an income may be expected from the road.

The company's business on the river is increasing; and although the amount of tolls in arrear has grown larger, the judicious arrangements made by Mr. Rand, the toll collector, under the direction of Mr. Walk-

er, have secured, and promise to make available, as large a portion of the tolls in arrear as can be realized, and to produce greater punctuality in future. The income of the company from the Kanawha river has depended almost exclusively on the prosperous business of the salt manufactures at the Kanawha salines. The policy of the company is to promote their prosperity. I am happy to learn that they have formed an association which promises to make their business more profitable and more steady in its operations. The terms of their agreement required the advance on the part of the manufacturers of considerable capital, and thus some degree of embarrassment has been felt amongst them in the beginning; but there is no doubt that it will be followed by larger profits and the more punctual payment of the expense of carrying their salt to market. Besides this, a very great advantage will result to the company from the certainty that the toll-collector will now be able to charge tolls on the entire amount of salt passing over the company's improvement. I anticipate more favorable results from this source of revenue in future than have been realized at any former period.

A new source of income to the company has arisen in the transportation of cannel coal, which is found in the utmost abundance in the basin of the Kanawha, and of which large quantities will be raised and sent down the river to the Gulf of Mexico and intermediate points. So superior is the quality of this coal, that it is understood that it will be used to supply the railroad across the Isthmus of Panama, and probably be used on steamers in the Pacific. And so rich and extensive are the fields of coal in the basin of the Kanawha, that it will form a most important article of freight on the canal eastwardly, when it shall have crossed the mountain.

I am not advised that the prosecutions against the company's officers, in the U. S. district court at Kanawha, of which mention was made in my last report, have been judicially disposed of.

##### *5. The Second Division, or Canal from Lynchburg to Buchanan.*

I am happy to announce to you that this important division of your great highway is opened to the use of the public. Your improvement has passed the Blue Ridge mountain, and entered the great Valley of Virginia. I would be most happy if each one of you could pass over the beautiful line of navigation thus established, through a most rugged and difficult section, and see for himself the works of art skillfully planned and constructed, the formidable obstacles interposed by nature now successfully overcome, and enjoy the magnificent scenery which overhangs the quiet but useful canal, destined, I trust, for ages to waft on its bosom to the tidewater, the rich products of the landlocked region which it has penetrated, and while it enriches, will unite more firmly in bonds of mutual interest and affection, the people east and west of the mountains.

This division is in length fifty miles, and the elevation overcome by 38 stone locks is  $297\frac{5}{2}$  feet. Throughout, the river passes through a narrow valley, often through mountain gorges, and is thus subject to

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sudden freshets, and the great descent gives to the current enormous force. The materials used in the works of art have been, with trifling exceptions, all found in the mountains, and have been so well combined that although in a most exposed state in different stages for three years, they have encountered but one injury of sufficient magnitude to attract public attention, or seriously to embarrass the operations of the line.

That injury was sustained by the dam four miles above Lynchburg, known as Judith dam. The breach in this dam was the subject of consideration by the stockholders at their last meeting; a committee investigated the causes of the breach and reported, and their report was accepted and referred to the board of directors. With the least practicable delay after your adjournment, the board took measures for repairing the injury and completing the dam. I submit herewith copies of the orders of the board and of reports from the chief engineer on this subject.

The work of repair and completion was conducted on company account. It was commenced in February, and completed on the 8th of September last. The opinions of eminent scientific and practical engineers were severally taken, and without any comparison of views amongst themselves, their conclusions concurred with remarkable unanimity, that the original plan and specifications of the dam were abundantly sufficient, and thus confirmed the opinion of the committee of stockholders, "that the plan of the dam, as designed by the engineer of the company, is sufficient for the purposes intended, and that had it been finished before the occurrence of the late freshet, it would not have been injured thereby."

It is but an act of justice to say, that the opinions of professor Mahan of West Point; of professor Ewell of William and Mary college; of Cols. Abert and Turnbull of the United States topographical engineers; of Mr. Roberts of Ohio, and of Messrs. J. B. Jarvis and McAlpine of New York, all sustained the chief engineer of the company in regard to the plan of this important work; and the energy and success with which the repairs have been made and the dam completed, have commanded the admiration of all who have witnessed them.

The board of directors did not consider that the breach of Judith dam resulted either from an insufficient plan, or from defective workmanship, but concurred with your committee in the opinion expressed in their report, that the disaster resulted from the unfinished and exposed condition of the work at the time the freshet occurred.

In my report, written in Nov. 1850, I expressed the opinion that the sum of one hundred and ten thousand dollars, furnished by the legislature, would be sufficient to complete the second division. The actual expenditures already made, and those which will be required to finish it off, shew that these funds will be inadequate.

The heavy expense incurred in the repair and completion of Judith dam and on the aqueduct over Cedar creek, and losses sustained by reletting works not finished by some of the contractors, and the cost of some works not included in the estimates, will account for this result.

### 6. *The Rivanna and Southside connections.*

The Rivanna connection is completed. The estimated cost of this work was eighty thousand dollars. The assessed land damages proved much higher than those estimated ; and the canal and locks were made larger than was originally intended, to conform to the improvements determined on by the Rivanna navigation company in their canal. By the terms of the act of assembly requiring the connection to be made by and at the cost of the James river and Kanawha company, the improvement is the property of the Rivanna company. The advantage to this company is, that the trade on the Rivanna now enters your canal at Columbia, and pays toll on a longer distance than formerly. The increase of business on the Rivanna, which may be anticipated from the improved navigation, will probably, in the process of time, indemnify this company for the expenditure made.

The connection with the Southside at Cartersville, by lateral canal and slack water, was completed in October last and is now in use. Those at Bent creek, Hardwicksville and New Canton, by bridges, are, notwithstanding the earnest efforts of the board of directors and officers of the company, yet unfinished. Such progress has been made in the construction of the abutments and piers, and in the preparation of the superstructure, as to ensure their completion by July next. The report of the chief engineer will explain the causes of delay.

### 7. *The third division.*

Measures have been taken for the prosecution of the work between Buchanan and Covington. Contracts have been made for three dams and the tunnel above Jackson. And the plan of the location of the improvement to Covington will be communicated to the Board of public works before the 20th of January next, to secure to the company the benefit of the act of January 20th, 1850.

Having accomplished the extension of the water line to Buchanan, the company has increased incentives to push the improvement on its western course. It is hoped that no friend of the noble enterprise in which you are engaged will hesitate in urging the completion of the important link to be furnished by this section in the great chain of connection between the eastern and western waters of Virginia.

As the funds appropriated to this object are insufficient to complete the entire division, it is the policy of the board of directors to complete and make available for navigation and revenue successive sections of the work. It would be far more gratifying to carry on the whole work, and urge it to a speedy completion, if adequate means were available.

## II. THE CONDITION OF THE FINANCES.

The usual financial statements of the secretary and of the collectors of the tolls at Richmond and Lynchburg are herewith communicated,

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marked 1, 2, 3, 4, 5, 6, 7. These statements have been carefully prepared, and present in a simple form :

1. The receipts and disbursements of the past fiscal year.
2. " " " " of the company from its organization to the 30th of September last.
3. The annual tonnage, tolls, and ordinary expenses and repairs of the canal.
4. A table shewing the different articles and their quantities annually transported on the canal.
5. } Classified tables of the quantities and probable value of the
6. } various articles of produce and merchandize transported
7. } during the last year.

They exhibit the condition of the company's affairs.

The gross receipts from the productive works of the company or improvements in operation, that is to say, the dock, the canal to Lynchburg, the Blue Ridge turnpike and ferry, and the Kanawha road and river, and from miscellaneous sources, to the 30th September, a period of 11 months, are

251,560 73

The disbursements for the same period for general administration, repairs ordinary and extraordinary, on the works above named,

82,020 91

Nett income, - - - - -

169,539 82

Disbursements for

Annuity to old James river company,

21,000 00

Redemption of post notes and dividend paid,

892 65

Amount of interest paid on company's bonds, state bonds loaned and guaranteed,

196,275 65

218,168 30

Excess of disbursements over receipts,

\$ 48,628 48

The income from the productive works has fallen short by this sum of meeting the charges on it during the last fiscal year, and it will be perceived that it results from the heavy demand for interest on bonds issued for the construction of portions of the work in progress.

The cost of the second division will exceed the funds appropriated for that purpose by at least one hundred and fifty thousand dollars, and that of the tidewater, Rivanna and Southside connections will overrun the appropriations for those objects. The precise amounts cannot be stated with accuracy, but, I apprehend, not less than one hundred thousand dollars. The works were indispensable, and the cost has been sedulously guarded, and was as small as under the circumstances it could be made. The report of the chief engineer will furnish the detailed information on the subject.

A considerable increase in the receipts of the company may be ex-



pected from the second division now in use, from the Rivanna, Southside and Tidewater connections, complete, and soon to be completed. And the balances already stated of deficiencies could with ease be liquidated from the company's own resources, but for the increased amount of interest on the debt for the cost of construction semi-annually accruing.

Exclusive of these deficiencies, the disbursements of the company for the fiscal year commencing on the 1st of October last, chargeable on its income, may be estimated as follows :

For interest on bonds due from the company,	-	239,678	72
Annuity to old James river company	-	21,000	00
Expenses of general administration and repair of canal			
to Lynchburg,	-	80,000	00
Expenses on 2d division to Buchanan,	-	25,000	00
Maiden's Adventure dam,	-	15,000	00
Post notes, principal and interest,	-	2,300	00
		<u>382,978</u>	<u>72</u>

Receipts for the same period may be estimated as follows :

Receipts, tolls and rents, 1st division,	270,000	
do. do. do. 2d do.	50,000	
From western improvements,	12,000	
	<u>332,000</u>	<u>00</u>
Estimated deficiency,		<u><u>\$ 50,978 72</u></u>

There may be received from the debt due from

Gen. Hamilton,	-	100,000
From W. B. Chittenden's estate,		11,000
		<u>\$ 111,000</u>

Which will be applicable to the extinguishment of the balances due from the company. Both claims are in the hands of counsel, and payment may be expected. It is hoped, but it is not certain, that these debts can be realized during the fiscal year. I think, however, that they may be relied on as the means of meeting the anticipated deficiency of the current fiscal year. The condition of the finances of the company now presented was anticipated ; and in my reports, and in your last general meeting, I called attention to the causes which must produce the result of a deficient income on account of the increasing charges on the company for interest on the cost of unproductive works. The amount of deficiency is larger than I apprehended ; this is because of the unexpectedly increased cost of constructing the works which have been mentioned, and the unforeseen delays in getting them into operation.

In the estimates submitted, nothing is anticipated from the Tidewater or Southside connections—when completed they will unques-



tionably be a source of increased income. The revenues of the company may also be increased by a modification of the tariff of tolls. There are some articles which are now excluded, but would pass over the canal with less tolls—others which would be increased in quantity, with more moderate tolls. I beg leave to refer to the views expressed in my last report, suggesting a revision of the tariff of tolls.

No company for the construction of a work of internal improvement has been placed in the situation which this occupies. Its capital stock was exhausted in completing a portion of its work. The means to progress have been furnished on loan, the company being required to pay 6 per cent. on the cost of construction as the work progresses. Since the second division was commenced, to the end of the last fiscal year, the company has paid \$431,274 of interest on money borrowed to construct works, which to that date had not contributed one cent to its revenues. This is a continuing charge, and any modification of the tolls should be made with a view to the increase of revenue, not speculative, anticipating in the future increase of freight by the creation of new articles, or additional quantities of freight, but to secure a present revenue sufficient to meet the pressing and unavoidable demands on the company. I have looked to the financial condition and prospects of the company with the deepest solicitude. I wish that the burthens on those using the canal could be lessened—and if the improvement could reach the Ohio river and compete for the vast freight now in existence beyond it, great reductions might be made in tolls, and yet a large increase of revenue result. The facility afforded by the improvement would induce a largely increased production of freight along the line, of articles agricultural and mineral, which now cannot be transported to market; and the reduction of tolls would then invite freight which now seeks other avenues to market. But I would deplore, as the greatest calamity which could befall the improvement, such a reduction of its income as would render it unable to pay interest to the bondholders, and subject the state to the liability of its guarantee.

In giving aid to the company to carry on its works, since the original subscription of stock, the legislature of the state seems to have proceeded on the principle that this improvement must from its own accruing revenues, meet the demands for interest and redeem the principal of bonds loaned or guaranteed, without resort to the state treasury. Every loan or guarantee by the state has been made dependent on proof of the ability of the company to pay the interest as it accrues, and a mortgage required to secure the commonwealth. With these repeated pledges of its property, the company, unaided by the state, cannot effect loans; and a failure to fulfill its obligations in regard to those debts for which the state is bound, will probably preclude a hope of future aid from that quarter. Thus compelled to rely on the company's unaided resources to meet its heavy engagements, it must be obvious that those resources ought to be increased as far as practicable and not be subjected to the risk of being reduced, so as not to secure adequate revenue for the purposes of the company.

And may not an appeal be successfully made to those along the

line of the improvement, who complain that the cost of its use to them is too high? They will perceive from the statements of the company's condition, and the causes which have led to it, the highest necessity for such revenue as will meet its honorable engagements; and they ought to bear in mind that the stockholders, individuals as well as the state, have not derived any income from their large investment of five million of dollars, except a dividend of one per cent., since the organization of the company.

I recommend that some measures be adopted at your present meeting to provide for the deficiencies now existing, and which will exist in the course of the next year by the completion of the several connections, and by the second division.

It is a question of great importance, What is the most judicious mode to adopt?

If the general assembly would assume the bonded debts of the company, and convert the amount into stock, it would leave the income of the company free from the incubus of the interest which now oppresses it. With its available means thus released, the company could pay the deficiencies, and in a short time have a surplus revenue, which would enable it to make dividends, or to raise funds to carry on its improvement towards its western terminus. How far the general assembly would feel authorized to make this arrangement, I cannot express an opinion. I apprehend that there is no impediment to their pursuing that course, if deemed best for the interests of the state in the provisions of the new constitution.

Another mode of relief for the company, is to ask of the legislature either to loan the company three hundred thousand dollars of state bonds, or to pay the semi-annual interest accruing on the company's bond debts until the 1st of July 1853; and with its prospects of revenue when all its works now in process of construction shall have been completed, the company will be justified in undertaking to repay into the treasury the amounts so to be paid within five years, I recommend that application be made for aid in this mode. The state is already bound for the payment of this interest; and it cannot be the policy of the legislature, by a refusal of aid, to compel the company to make default to its creditors.

### III. OTHER MATTERS OF INTEREST, CONCERNING THE CONDITION AND FUTURE PROSPECTS OF THE COMPANY.

The funds which will be applicable to the third division or the water line from Buchanan to Covington are wholly inadequate to the accomplishment of the entire work. As I presume that both the legislature and the company will desire to complete the improvement at as early a day as practicable, and as in future the sessions of the legislature will be biennial, I recommend that application be made to the general assembly at its next session for such aid as may be lawfully given, to enable the company to progress uninterruptedly with this important work.

I informed you in my last report that the board of directors had

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adopted measures for the examination of the line from Covington to the mouth of the Greenbrier, west of the Alleghany, with a view to the location of the line of improvement, and especially with the desire of settling the disputed problem of the practicability of carrying the water line across the Alleghany mountain, with a reliable supply of water for the summit level.

A party of engineers, at the head of which was Mr. Ed. Loraine, have, under the direction of the chief engineer, made the reconnoissances and surveys. The field notes are not yet worked up. As soon as they are in such condition as to be reported, they will be presented to the stockholders. This I apprehend cannot be done in time for your present meeting. Professor Tuomey of the University of Alabama, who is the geologist of that state, kindly complied with the invitation of the board, and made a laborious geological examination of the route of the summit level; and I have the pleasure to communicate herewith his carefully prepared and most satisfactory report. I am happy to find, that in the opinion of this distinguished man, the geological structure is admirably adapted to the purposes of the water line across the mountain. The formation is most favorable for the construction of the work, for the establishment of reservoirs to hold the natural streams for the supply of the canal; and the facts and reasoning of the report would seem to leave no well founded doubt of the entire feasibility of this part of the water line, both as to execution and a reliable supply of water. The advantages of a continuous water line, instead of a mixed improvement, partly of canal and partly of railroad, or other mode of crossing a portage over the mountain, are becoming more obvious, in my judgment, as the competing works of other states progress. The vast trade of the populous and productive states north of the Ohio may now seek a market down stream to New Orleans, or by way of the lakes to New York or Boston. Besides these outlets to market, Pennsylvania and Maryland have entered into the competition by their improvements stretching from the east to the west. Railroads are partly executed or planned, extending southwardly across the Ohio river to Mobile, Augusta, Savannah and Charleston. Connecting improvements, from west to east, across the states lying north of the Ohio river, are about to be located, and will be vigorously prosecuted. Your improvement will have advantages over them all—and will secure still greater, if Virginia shall declare her will that the long hoped for connection of the Atlantic with the western waters shall be made. Wisdom and patriotism alike appear to call for such a determination, and for the vigorous prosecution and completion of the great work. On the western slope of the Alleghany the difficulties of the undertaking are not near so great as those on the east, which have already been overcome with the most complete success. Steamboat navigation can be established to the mouth of the Greenbrier river, and with adequate means the whole work can be completed within a few years. If completed, I cannot doubt, that with reduced tolls, the company will receive an income sufficient to defray all its debts, and ultimately make the stock a profitable investment to the stockholders, of which the state is greatly the largest.

It is not improbable that the legislature assembling under the new constitution may devise some general system by which the great works of improvement in the state will be completed, and its large investments in them be made productive. I recommend that you authorize a memorial to be prepared and presented to the legislature, asking that your improvement may be provided for, if such a system shall be adopted. I make this recommendation with a thorough conviction that the complete execution of the company's work connecting the eastern and western waters would be most wise as a *financial* measure, securing to the state a satisfactory income on large investments now unproductive; would enlarge the trade and commerce and general revenues of the state, and relieve her from heavy liabilities for the company, which, with its present limited means, it cannot hope to meet within any reasonable time, and would enable the company, without injustice to other portions of the state not using the canal, or to its own stockholders, to reduce the cost to those who may use it.

The price of slaves has been so high during the past year, that it has not been deemed judicious to purchase any, as authorized by the resolution of the stockholders at the last meeting.

I recommend that the time of the future general meetings of the stockholders be changed to the fourth Monday of October in each year. This change will conform to the change made in the fiscal year, and will meet the wish of the Board of public works, that the annual reports of all internal improvement companies, in which the state is interested as a stockholder, may be communicated to the board by the first of November.

I have the honor to be,

Very respectfully,

Your ob't servant,

J. Y. MASON.

*November 24th, 1851.*

[Dec. No. 18.]

[No. 1.]

*Summary Statement of Receipts and Disbursements of the James River and Kanawha Company from the 31st October 1850, to the 30th September 1851.*

IMPROVEMENTS IN OPERATION.

WESTERN IMPROVEMENTS.

KANAWHA ROAD.

RECEIPTS:

From tolls at gates and bridges,	-	7,356 10	
From property sold,	-	179 00	
		<u>7,536 08</u>	

DISBURSEMENTS:

On road account,	-	3,887 03	
Bridge account,	-	3,653 18	
Agency,	-	687 50	
		<u>8,227 71</u>	

Excess of disbursements over receipts, 691 71

KANAWHA RIVER.

RECEIPTS:

From tolls,	-	9,714 65	
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DISBURSEMENTS:

Repairing sluices,	-	1,889 23	
Damages to boats,	-	438 00	
Law expenses,	-	221 13	
Agency,	-	1,604 16	
		<u>4,152 52</u>	

Nett revenue from Kanawha river, 5,562 13

Deduct amount overpaid by agent last year, 4,870 62

277 52

4,593 10

Amount in agent's hands, \$ 459 50.

BLUE RIDGE TURNPIKE AND FERRY.

RECEIPTS:

From tolls,	-	1,291 11	
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DISBURSEMENTS:

Expenses and repairs of road and ferry,	-	916 00	
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375 11

Amount in agent's hands, \$ 375 11.

CANAL FROM RICHMOND TO LYNCHBURG.

RECEIPTS:

From tolls,	-	212,892 55	
From penalties,	-	551 51	
		<u>213,444 06</u>	

From rents,	-	8,110 50	
From scale-house fees,	-	559 01	
		<u>222,113 57</u>	

DISBURSEMENTS:

Expenses and repairs of canal,	-	43,789 41	
Salaries of agents on the canal,	-	14,656 34	

General administration:

Salaries of officers,	-	3,164 13	
Pay and mileage of directors,	-	899 74	
Expenses of president and directors, of meetings of stockholders, legal expenses, advertising, &c.	-	1,637 16	
		<u>5,701 03</u>	

Total disbursements, deduct from receipts, 64,146 78

Nett revenue from the canal, 157,966 79

Amount in agent's hands, \$ 4,769 99.

Carried forward, \$162,935 00

	Brought forward,	162,935 00
<b>CHMOND DOCK.</b>		
<b>RECEIPTS:</b>		
From dockage,	4,660 47	
Less amount of uncollected bills,	175 27	
	<hr/>	4,485 20
<b>DISBURSEMENTS, on the following accounts:</b>		
Agency and collection of tolls,	798 33	
Repairs of the dock,	171 56	
	<hr/>	969 89
Nett revenue from the dock,	<hr/>	3,515 31
Amount in agent's hands, \$1,630 04.		
<i>Miscellaneous account:</i>		
<b>RECEIPTS:</b>		
From delinquent subscribers,	1,638 06	
From interest on stock arrears,	468 34	
From bills receivable for stock arrears,	1,271 77	
From premium and interest on guaranteed loan:		
For the tidewater connection,	1,850 90	
For the Southside and Rivanna connections,	1,231 45	
From construction of works 1st division, for sale of granite,	237 00	
	<hr/>	6,697 52
		<hr/>
		173,147 83
<i>Premium and Accrued Interest on State Stock sold for Resumption of Works, and for Completion of Canal to Buchanan:</i>		
<b>DISBURSEMENTS:</b>		
Amount paid to second auditor,	77,460 00	
Less amount received,	7,095 57	
	<hr/>	70,364 43
		<hr/>
	General income—total,	<u>\$102,783 40</u>
<b>GENERAL INCOME ACCOUNT.</b>		
Fund derived from various sources, as above,	-	102,783 40
<b>DISBURSEMENTS, chargeable thereon, as follows:</b>		
<i>Const'n of Works, 1st Div. (from Rich'd to Lynchb'g):</i>		
Interest on post notes redeemed,	333 40	
Maiden's Adventure dam,	3,097 27	
Basin walls and culvert at penitentiary pond,	510 74	
Post notes redeemed,	555 00	
	<hr/>	4,496 41
		<hr/>
Nett revenue, applicable to interest and annuity debt,		<u>\$ 98,286 99</u>
<b>REVENUE ACCOUNT.</b>		
Fund composed of nett revenue, as above,	-	98,286 99
<b>DISBURSEMENTS, as follows:</b>		
Annuity to the Old James river company,	21,000 00	
Dividends on guaranteed loan of 23d March 1839,	79,729 50	
Div. on guar'd loan for the tidewater connection,	9,012 00	
“ “ Southside and Rivanna connections,	6,051 00	
Interest on loan of state stock,	15,000 00	
Interest on bond given to the state,	16,118 72	
Dividends of the James river and Kanawha company,	4 25	
	<hr/>	146,915 47
		<hr/>
		48,628 48
<i>Add amounts loaned to the following Improvements, and to be refunded:</i>		
SECOND DIVISION, (from Lynchburg to Buchanan,) -		68,469 92
THIRD DIVISION, (from Buchanan to Covington:)		
Lock,	8,665 67	
Pay of engineers,	5,615 08	
Expenses of engineers,	3,346 00	
Pay and expenses of superintendent of cement,	642 76	
Engraving plate and printing coupon bonds,	581 00	
	<hr/>	18,850 51
		<hr/>
	Carried forward,	<u>\$135,948 91</u>

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	Brought forward,	-	-	135,948 91
FOURTH DIVISION, (from Covington to Greenbrier river:)				
DISBURSEMENTS:				
Expenses of engineers,	-	-	2,239 46	
Pay of engineers,	-	-	2,069 54	
Rain gauges,	-	-	10 00	
				4,319 00
Southside and Rivanna connections,	-	-	-	8,241 66
Add amount borrowed from new improvements on the 31st October 1850,	-	-	-	
and now refunded,	-	-	-	8,638 37
Excess of disbursements over receipts borrowed from the appropriation for the Tidewater connection, and to be refunded,	-	-	-	\$157,148 14

UNFINISHED IMPROVEMENTS, (between Lynchburg and Buchanan.)

Balance on hand 1st November 1850,	-	-	105,948 31
RECEIPTS:			
From sale of state stock,	-	-	192,750 00
From rents,	-	-	200 00
			192,950 00
			298,898 31

DISBURSEMENTS on the following accounts:

Construction of Works below North river:

Sections,	-	-	21,215 43
Dams,	-	-	95,035 67
Locks,	-	-	31,940 55
Bridges,	-	-	6,946 53
Culverts,	-	-	592 23
Waste weirs,	-	-	3,559 99
Cement,	-	-	9,108 00
Acquisition of lands,	-	-	1,494 73
Lock houses,	-	-	1,107 87
Gauge dock,	-	-	792 27
Dredge boat,	-	-	94 03
Pay of arbitrator,	-	-	20 00
Pay of engineers,	-	-	3,787 79
Expenses of engineers,	-	-	746 45
Pay of superintendents,	-	-	4,657 19
Hire and expenses of hands,	-	-	15,458 38

General administration:

Salaries of officers,	-	1,758 12
Pay and mileage of directors,	500 71	
Expenses pres't, directors, &c.	918 67	

3,178 50

202,737 60

Construction of Works above North river:

Sections,	-	-	25,812 41
Dams,	-	-	35,231 53
Locks,	-	-	65,652 24
Bridges,	-	-	1,418 51
Culverts,	-	-	4,862 66
Aqueduct,	-	-	11,496 87
Waste weirs,	-	-	746 40
Cement,	-	-	1,003 93
Acquisition of lands,	-	-	2,662 12
Lock houses,	-	-	207 13
Gauge dock,	-	-	3,285 44
Dredge boat,	-	-	94 03
Pay of assessors,	-	-	145 40
Fee of counsel in assessment cases,	-	-	171 28
Taxes,	-	-	17 46
Pay of engineers,	-	-	5,476 85
Expenses of engineers,	-	-	449 34
Pay of superintendents,	-	-	2,134 00
Hire and expenses of hands,	-	-	1,223 03

Carried forward,

\$162,090 63

202,737 60

298,898 31

Brought forward,	162,090 63	202,737 60	298,898 31
<i>General administration :</i>			
Salaries of officers,	1,406 00		
Pay and mileage of directors,	399 00		
Expenses of pres't, directors, &c.	735 00		
	<u>2,540 00</u>		
		<u>164,630 63</u>	<u>367,368 23</u>
Excess of disbursements over receipts borrowed from improvements in operation, and to be refunded,	-	-	<u>\$68,469 92</u>

## SOUTHSIDE AND RIVANNA CONNECTIONS.

Balance on hand 1st November 1850,	-	-	13,275 35
<i>RECEIPTS:</i>			
From sales of guaranteed bonds,	-	-	84,100 00
			<u>97,375 35</u>

### DISBURSEMENTS on the following accounts:

#### *Southside connections :*

##### *Cartersville connection :*

Lock,	-	9,605 24	
Dam,	-	2,321 82	
Bridge,	-	1,238 14	
Culvert,	-	1,271 28	
		<u>14,436 48</u>	
Bridge at Bent creek,	-	10,269 40	
Bridge at Hardwicksville,	-	16,470 60	
Bridge at New Canton,	-	11,917 85	
Cement,	-	6,199 15	
Pay of engineers,	-	1,253 01	
Expenses of engineers,	-	75 30	
Pay of superintendent and hands,	-	790 42	
		<u>61,412 21</u>	

##### *Rivanna connection :*

Sections,	-	16,027 54	
Dam,	-	6,152 89	
Locks,	-	7,287 30	
Culverts,	-	5,120 86	
Bridges,	-	2,117 60	
Waste weirs,	-	170 17	
Cement,	-	2,423 02	
Assessments,	-	2,935 00	
Pay of engineers,	-	1,201 48	
Expenses of engineers,	-	192 73	
Pay of superintendent,	-	576 41	
		<u>44,205 00</u>	
			<u>105,617 21</u>

Excess of disbursements over receipts borrowed from improvements in operation, and to be refunded,	-	-	<u>\$8,241 86</u>
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## TIDEWATER CONNECTION.

Balance on hand 1st November 1850,	-	-	31,228 15
<i>RECEIPTS:</i>			
From sales of guaranteed bonds,	-	235,800 00	
From property sold,	-	168 50	
From rents,	-	1,486 69	
		<u>237,455 19</u>	
Carried forward,			<u>\$268,683 34</u>



				Brought forward,	268,683 34
<b>DISBURSEMENTS:</b>					
Ship lock,	-	-	-	29,649 01	
Five locks,	-	-	-	44,383 05	
Cement,	-	-	-	6,244 40	
River wall,	-	-	-	186 25	
Aqueduct,	-	-	-	1,430 70	
Assessment of damages,	-	-	-	20,812 50	
Pay of assessors and clerk,	-	-	-	743 40	
Pay of engineers,	-	-	-	2,775 00	
Expenses of engineers,	-	-	-	295 40	
Pay of superintendents,	-	-	-	1,085 13	
Trunks from canal,	-	-	-	1,671 61	
Crib for walls,	-	-	-	331 04	
Sections,	-	-	-	584 34	
Bridges,	-	-	-	387 08	
Repairs of lumber house,	-	-	-	116 10	
Taxes and insurance,	-	-	-	157 48	
					<u>110,772 49</u>
					<u>157,910 85</u>
Deduct amount loaned to improvements in operation, and to be re-					
funded,					<u>157,148 14</u>
Balance on hand,					<u>\$ 762 71</u>
Guaranteed loan for third division, (coupon bonds issued and unsold,)					<u>\$100,000 00</u>
Amount in the Bank of Virginia,	-	3,062 98			
Amount in agents' hands, as above,	-	7,254 64			
				<u>10,317 62</u>	
Deduct warrants afloat,	-	-		9,554 91	
Cash on hand,	-	-			<u>\$ 762 71</u>

E. E.

WM. P. MUNFORD, Secretary.

OFFICE JAMES RIVER AND KANAWHA COMPANY,  
Richmond, Oct. 1st, 1851.

7

## RECEIPTS and DISBURSEMENTS of the JAMES RIVER AND KA-

## OLD IMPROVEMENTS and

## RECEIPTS.

From income of old works, viz:			
Old canal, (tolls and rents,)	-	-	291,807 87
Kanawha road,	-	-	168,529 25
Kanawha river,	-	-	120,807 20
Blue Ridge canal, (including the turnpike and ferry,)	-	-	33,600 13
			<u>614,744 45</u>
From income of the new canal from Richmond to Lynchb'g, viz:			
Tolls,	-	-	2,026,676 14
Rents,	-	-	77,080 55
Scale-house fees,	-	-	559 01
			<u>2,104,315 70</u>
From state's loan of interest money,	-	-	57,559 36
From premium and interest on state's loan for resumption of works above Lynchburg,	-	-	43,734 38
From premium and interest on state's loan for completion of works to Buchanan,	-	-	1,271 09
From premium and interest on guaranteed loan:			
For tidewater connection,	-	-	4,290 61
For Southside and Rivanna connections,	-	-	3,008 97
			<u>52,303 06</u>
From income of the Richmond dock,	-	-	82,348 66

## NEW IM-

## RECEIPTS.

From capital stock,	-	-	5,000,000 00
Less:			
State's credit for old works,	1,000,000 00		
Uncollected stock subscriptions,	70,133 84		
			<u>1,070,133 84</u>
			3,929,866 16
From guaranteed loan of 23d March 1839,		1,400,000 00	
Do. Tidewater connection,		350,000 00	
Do. Southside and Rivanna connections,		150,000 00	
From loan of state stock,		250,000 00	
From bond given to the state,		268,645 33	
			<u>2,418,645 33</u>
From sale of land received from the old James river company,		28,484 46	
From rents and property sold on			
Second division,		500 00	
Tidewater connection,		1,889 77	
			<u>30,874 23</u>
			6,379,385 72
From state's loan for resumption of works above Lynchburg,			1,236,000 00
From state's loan for completion of canal to Buchanan, issued March 13th, 1851,		110,000 00	
Less amount unsold,		22,350 00	
			<u>87,650 00</u>
			1,323,650 00
From guaranteed loan for third division, (coupon bonds,)			100,000 00
			<u>\$10,714,306 94</u>

OFFICE OF THE JAMES RIVER AND KANAWHA COMPANY,  
Richmond, Oct. 1st, 1851.

2.]

KANAWHA COMPANY, from its organization to the 30th September 1851.

## NEW WORKS in operation.

## DISBURSEMENTS.

For repairs and maintenance of the			
Old canal, from Richmond to Maiden's Adventure,	-	60,436 98	
Kanawha road,	-	146,917 70	
Kanawha river,	-	46,561 53	
Blue Ridge canal, (including the turnpike and ferry,)	-	36,756 62	
			290,672 83
New canal, from Richmond to Lynchburg,	-	671,039 51	
Damages to same by fresh of July 1842,	-	67,542 23	
Damages to same by fresh of November 1847,	-	21,424 48	
			760,006 22
Additional charges on revenue, viz:			
Annuity to the Old James river company,	-	346,500 00	
Dividends of the James river and Kanawha company,	-	11,579 16	
Dividends on guaranteed loan of 23d March 1839,	-	846,641 68	
Do. do. for Tidewater connection,	-	12,216 00	
Do. do. for S. side and Rivanna con.	-	8,019 00	
Interest on loan of state stock,	-	128,423 90	
Interest on bond given to the state,	-	102,264 30	
Interest on state's loan for resumption of works,	-	185,040 00	
Do. for completion of works to Buchanan,	-	3,300 00	
Other items of interest and discount,	-	1,680 00	
Expenses of general administration of the company,	-	78,644 81	
Amount retained by Wm. B. Chittenden to pay dividends,	-	450 00	
			1,724,758 85
For repairs and maintenance of the Richmond dock,	-	-	30,198 44

## PROVEMENTS.

## DISBURSEMENTS.

For construction of works from Richmond to Lynchburg,			
Expenditures on works above Lynchburg previous to their suspension,	-	5,196,656 23	
Purchase and improvement of Richmond dock,	-	482,428 57	
Tidewater connection,	-	244,721 98	
Southside connections,	-	203,211 92	
Rivanna connection,	-	74,626 63	
Western surveys,	-	83,615 23	
Third division from Buchanan to Covington,	-	25,028 99	
Fourth division from Covington to Greenbrier river,	-	24,783 55	
		4,688 50	
			6,339,761 60
For loss by Gen. Hamilton's agency,			
Notes from delinquent subscribers and others for arrearages,	-	63,820 45	
Securities in agents' hands collecting stock arrearages,	-	4,241 84	
Post notes, (amount reissued, date unknown,)	-	1,054 08	
Wm. B. Chittenden,	-	910 00	
		5,500 00	
			75,526 37
For construction of works from Lynchburg to Buchanan, viz:			
Below North river,	-	863,802 34	
Above North river,	-	528,817 58	
			1,392,619 92
Coupon bonds unsold,	-	-	100,000 00
Cash on hand,	-	-	762 71

\$10,714,306 94

WM. P. MUNFORD, Secretary.

*Reports of the Majority and Minority of the Committee appointed to investigate certain matters relating to the James River and Kanawha Canal Company.*—[House Doc. No. 71.]

REPORT.

The committee appointed to enquire into "The causes which have lured the James river and Kanawha canal company to increase the salary of its president to three thousand dollars per annum; also the causes of the falling of the dam constructed across James river, called Judith dam; the causes of the company's delay in completing its work to Buchanan; also to enquire into the expediency of prohibiting by law the chief engineer of that company from accepting office or employment upon any other public work within or without the state while holding said office," after consultation and conference, have agreed to the following report:

That for want of time they have been unable to make the investigation ordered by the house of delegates. The complaints that have been made against the officers of the James river and Kanawha company are grave, and they come from a source so respectable as to entitle them to the examination of the legislature. The committee have not had the time and means of making such investigation as would do justice, on the one hand, to the officers of the James river and Kanawha company, and, on the other, to those who complain of the conduct and management of the officers of that company; but they are of opinion, that this investigation having been ordered, it is due to the commonwealth and the other parties concerned, that it should be made, that the legislature may have reliable information upon which to shape its course in regard to the important topics and questions involved. That in order to give time and more favorable circumstances for thorough investigation, it be recommended to the house of delegates to appoint a committee of five of its members to visit the works of the company above the town of Lynchburg, after the adjournment of the present general assembly, with instructions to report the results of their investigation to the Board of public works, to be laid by them before the next general assembly, and that said committee have power to send for persons and papers.

All which is respectfully submitted.

*Minority Report of the Committee of the House of Delegates appointed on the 12th day of February ultimo, under the following Resolution offered by Mr. CARRINGTON of Botetourt, on the 31st of January last, to wit:*

*“Resolved, That the committee on roads and internal navigation be instructed,”* (modified so as to read) *“that a special committee be appointed to enquire into and report to this house the causes which have induced the James river and Kanawha canal company to increase the salary of its president to three thousand dollars per annum; also to enquire into and report the causes of the fall of the dam constructed by that company across James river, commonly called Judith dam, and the causes of that company’s delay in completing its works to Buchanan; also to enquire into the expediency of prohibiting by law the chief engineer of that company from accepting employment upon any other public work within or without this state while holding the said office; also to enquire into the expediency of prohibiting by law the chief engineer of any company in which this state is a stockholder from accepting employment in any other company than that in which he is the chief engineer.”*

The minority of your committee, dissenting from the majority, deem it but just to all parties concerned, that facts which do not appear in the report of the majority should be laid before the house.

They do not consider it the duty or province of the committee to make any recommendation in regard to the appointment of another committee to do that which they have themselves entirely failed to do, particularly in view of the fact that the stockholders of the company in question, after the most thorough investigation of the very charges involved in the resolution under which this committee was appointed, approved the official conduct of the officers of the company, and without solicitation increased the salary of the president to the amount at which it was originally established.

The minority therefore beg leave to report:

That the chairman of the committee, on the 14th day of February, received a communication from the president of the canal company, which was laid before the committee, and a copy of which, together with the answer of the chairman, is hereto annexed.

The chairman also, on the 21st day of February, received a communication from the chief engineer of that company, which, though shewn to some members, has not been presented to the committee.

A copy of said last named letter, and of the answer thereto, is hereto appended.

These communications offer every facility, and urge the committee to proceed in the investigation.

No evidence has been placed before the committee by any one complaining, upon which to predicate a response to any of the enquiries above indicated.

No witness has been summoned, no papers or testimony introduced, nor any call made or opportunity afforded for those whose conduct is complained of to present evidence or explanation.

Neither the officers of the company nor any of the stockholders or state proxies have been notified by the committee of the time or place of meeting, or even of the appointment of the committee.

Under these circumstances, and with this statement of facts, the minority also ask that the committee be discharged, and recommend the adoption of the following resolution:

*Resolved*, That the committee appointed on the 12th of February last "to enquire into, and report to this house, the causes which have induced the James river and Kanawha canal company to increase the salary of its president," &c., be discharged from the further consideration of the subjects to them referred.

At a meeting of the executive committee of the James river and Kanawha company, held on Friday, 14th February 1851 :

The president called the attention of the executive committee to the following resolutions, which appear in the published proceedings of the house of delegates of Virginia to have been adopted on the 12th of February instant :

*Resolved*, That the committee on roads and internal navigation be instructed to enquire into and report to the house the causes which have induced the James river and Kanawha canal company to increase the salary of its president to \$ 3,000 per annum.

*Also to enquire into and report the causes of the falling of the dam constructed by that company across James river, commonly called Judith dam, and the causes of that company's delay in completing its work to Buchanan.*

*Also to enquire into the expediency of prohibiting by law the chief engineer of that company from accepting employment upon any other public work within or without the state, while holding the said office.*

*Also to enquire into the expediency of prohibiting by law the chief engineer of any company, in which the state is a stockholder, from accepting employment in any other company than that in which he is the chief engineer."*

And suggested the propriety of offering to the committee, raised under said resolutions, such facilities as may be required or received by the said committee in the performance of their duties.

*Ordered*, That the secretary of this company be instructed to submit to the free and full inspection of the house committee. the books, records and papers in his office, whensoever required so to do by the committee, and that he and the other officers of the company make promptly all such explanations as the committee may desire.

*Resolved*, That with a view to more convenient reference to the same, the use of the directors' room, in the company's office, be placed at the disposal of the committee of the house of delegates, for their use during their sittings.

*Resolved*, That the president communicate to the chairman of the house committee the foregoing resolutions.

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At a meeting of the president and directors of the James river and Kanawha company, held on Wednesday, February 19th, 1851 :

The president reported to the board that, in accordance with a resolution adopted by the executive committee on the 14th inst., he had addressed a communication to E. C. Carrington, Esq., chairman of a committee of investigation appointed by the house of delegates, and received a reply from him as follows :



[ Doc. No. 18.]

OFFICE JAMES RIVER AND KANAWHA CO.  
Richmond, Feb. 14th, 1851.

Sir,

Perceiving by the published proceedings of the house of delegates, that a committee has been appointed to carry out resolutions of that honorable body, by making enquiry into certain acts of the stockholders of the James river and Kanawha company, and other matters connected with the administration of its affairs, the executive committee in the absence of the board of directors have instructed me to communicate to you as the chairman of the house committee, the accompanying copy of resolutions adopted on the subject of your enquiries.

I beg to add the assurance that it will afford me and all the officers of the company much pleasure to furnish every facility in our power to yourself and the committee in the discharge of the duties devolved on you.

I have the honor to be,

Very respectfully,

Your ob't serv't,

J. Y. MASON, *Pres.*  
*James River and Kanawha Co.*

MR. CARRINGTON of Botetourt, Chairman, &c.

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HOUSE OF DELEGATES, Feb. 15, 1851.

DEAR SIR,

I have received your polite letter proffering the use of the rooms of the James river and Kanawha company to the committee of investigation appointed by this house, of which I am chairman. I shall lay the letter before the committee at its first meeting, and think it probable that they will find it expedient to accept the company's obliging offer.

With great respect,

Your ob't serv't,

E. C. CARRINGTON, JR.

HON. JOHN Y. MASON, *Pres.*  
*James River and Kanawha Co.*

Extract from the records.

WM. P. MUNFORD, *Sec.*

RICHMOND, February 21, 1851.

SIR,

I am informed that the committee of which you are chairman had a meeting yesterday and adjourned until Wednesday next.

It must be desired by those who have sought the enquiry, and it is especially important to myself, that this investigation should be promptly and fully made, for the plain and obvious import of the resolutions is in fact an arraignment of my professional reputation, but to some extent an implication of the honorable discharge of my duties.

I submit therefore to the committee, as an act of justice to myself, being thus publically and officially assailed, whether a full and thorough investigation should not be entered into, that I may, by reference to the records of the company and other evidence, refute the charges and implications that otherwise may operate to my injury.

I have only to add, that my professional engagements are pressing, and that I appeal to the committee to afford me the earliest opportunity to exercise the privilege accorded to any citizen of the commonwealth when publically arraigned.

Yours, very respectfully,

(Signed,)

WALTER GWYNN.

E. C. CARRINGTON, ESQ.

*Chairman, &c. House of Delegates.*

RICHMOND, February 21, 1851.

SIR,

I handed your letter to several members of the committee of which I am chairman, for their consideration; and in consequence of our pressing engagements before other committees and before the house, we concluded that it would be impracticable to have a full meeting at an earlier day than the one determined upon at our last meeting. I will, for my own part, cheerfully consult your pleasure and convenience in this matter in every way consistent with my duty.

Yours, very respectfully,

(Signed,)

E. C. CARRINGTON, JR.

MAJOR GWYNN.

*Substitute intended to be proposed by Mr. Carrington of Botetourt, to the Report of the Committee appointed to investigate certain matters relating to the James River and Kanawha Company.*

The committee to whom were referred the resolutions of this house, concerning the salary of the president of the James river and Kanawha company—the delays of that company in completing its works to Buchanan—the falling of the dam constructed by that company, commonly called the Judith dam—and the expediency of prohibiting the chief engineer of the said company, and of other internal improvement companies in which the state is a stockholder, from accepting employment from any other company than that in which he is chief engineer, have had the subjects of the said resolutions under consideration, and beg leave to report :

They have no other means of judging of the propriety of the recent increase of the president of the said company's salary, than is possessed by the members of this body. They are of opinion that the said increase of salary during the present embarrassed condition of that company's affairs and of the treasury of the commonwealth, was inexpedient ; and they recommend the adoption of the resolution upon that subject which is appended to this report.

They are of opinion that the time intervening before the adjournment of the present legislature is too limited to admit of that thorough investigation into the causes of the delays of the said company's works and the falling of the said Judith dam, which the importance of those subjects, and justice to all parties concerned, demand. It is true that the said company have thrown open their books to the committee, and offered every facility at their command for such an investigation ; but the evidence thus afforded, consisting as it does in great part of the reports of the officers whose conduct is implicated, is in its nature *ex parte*, and such as would not be satisfactory to the legislature or to the public at large. If contractors have failed to execute their contracts in the periods agreed upon, the causes of failure are best known to, and may be most impartially learned from, persons along the line of operations, who were eye-witnesses of the conduct, as well of the contractors as of the officers of the company. If the cause of delay was the letting of contracts to persons of insufficient pecuniary means and deficient personal energy and enterprise, and blame be imputable on that account to the officers of the company, the fact can best be shewn by evidence derived from those who, from vicinity to, and personal acquaintance with, the contractors, possess the most perfect knowledge of their character and pecuniary circumstances. Evidence upon these essential points in the investigation can best be taken, and probably can only be obtained along the line of the work, and among the community through which it passes. The committee therefore

recommend the adoption of the resolution hereto appended upon that subject.

The committee are of opinion that no investigation is necessary upon the expediency of prohibiting chief engineers engaged upon public improvements in which the state is interested, from accepting employment from other companies than those in which they are chief engineers, and therefore recommend the adoption of the resolution upon that subject hereto appended.

The committee therefore beg leave to report the following resolutions :

*Resolved by the general assembly of Virginia,* That the proxies of the state in the James river and Kanawha company be and they are hereby instructed to move a resolution at the next meeting of the stockholders of the said company, reducing the salary of its president to two thousand dollars per annum, to cast the vote of the state in support of said resolution, and to repeat the said motion and vote at every meeting of the said stockholders until the said reduction is effected.

*Resolved,* That the Board of public works be and they are hereby instructed to enquire fully into the causes of the delay of the James river and Kanawha company in completing their works to Buchanan; also into the causes of the falling of the Judith dam, constructed by said company across James river; also into the first cost of works of said company from the commencement of their operations to the end of the current fiscal year; also into the conduct, efficiency and attention to duty of the officers of the said company since the resumption of operations above Lynchburg: that besides such other evidence as may be collected by or laid before them, they cause evidence in writing to be taken at such points upon the line of the works above Lynchburg as they may think expedient; and that they report the result of their enquiries and the evidence collected by them to the next general assembly.

*Resolved,* That the proxies of the state in all internal improvement companies in which the state is or may be a stockholder, be and they are hereby instructed to cast the vote of the state against every chief engineer employed by any such company, who shall accept employment in any other company, or upon any other public work than that of which he is the chief engineer.

All of which is respectfully submitted.

[A.]

ENGINEER'S REPORT.

*the President and Directors  
of the James River and Kanawha Company.*

GENTLEMEN,

In the present annual report I have for my topics—

- First.* The Tidewater connection.
- Second.* The Rivanna connection.
- Third.* The Southside connection.
- Fourth.* The first division of the canal.
- Fifth.* The second division.
- Sixth.* The third division; and
- Seventh.* The fourth division.

In my remarks upon these several subjects, I shall confine myself to a simple, brief and summary statement of facts, which needs no ornament of language to give them force and effect—no figures of speech to set them forth. With this restriction upon myself, I proceed with—

I. TIDEWATER CONNECTION.

The works under this head were by contract entered into at various dates during the fall of 1849, and required to be completed on the 1st day of December 1851. They will not be completed by that time, nor can I fix any precise time for their completion. Upon the announcement of this fact, the enquiry will, naturally enough arise, why the contractors have not been required and compelled to comply with their contracts. In reply, I beg leave to refer to my numerous reports to the board, setting forth the condition of the contracts, and stating the failure of the contractors to comply with the requisitions of the engineers to increase their forces; and to the sundry resolves of the board, based upon these reports. They will shew that every effort and every means have been resorted to to enforce a compliance with the contracts.

Mr. Bernard McGrann, the contractor for the five locks between the basin and the dock, relinquished his contract for locks Nos. 4 and 5 on the 25th day of March 1851. They were immediately relet to Mr. Samuel Laird, who seemed to have made arrangements that would ensure their timely completion; and Mr. McGrann gave every promise of a satisfactory and vigorous prosecution of the remainder of his contract. But in these expectations we were disappointed. Mr.

McGrann has not completed more than two-thirds of the remaining work left to him, after throwing up his contract for locks 4 and 5 ; and the contract for these locks with Mr. Laird progressed so slowly, that it became necessary to abandon it on the 19th day of July 1851. They were then commenced without delay, and are now progressing on company account.

The ship lock has been delayed by unforeseen difficulties, encountered in cutting through the cribs on the river side, which line the slip leading from the old ship lock, and in cutting through the log wharfing on the other, or Rocketts side of the slip, for the purpose of extending the coffer dams for the new ship lock, past these timbers, which would have served as a lead to the waters into the lock pit.

This work has also been further delayed by the inadequacy of the power, provided by the contractor for pumping the water out of the portion of the channel below the old lock, which forms the site of the new lock. It is due to the contractor to say that the inadequacy of his pumping power was owing to a greater amount of leakage than was anticipated. He has now contracted for an engine of eighty horse power, which, it is believed, will be sufficient to free the site of the lock for water, when the work will progress steadily and rapidly to completion.

I am aware that censure is attached to those having charge of the work for the delay in its prosecution, and that the delinquency of the contractors which is assigned as the cause, is not by every one considered a sufficient excuse.

The question is asked, why do you not dismiss the recusant contractors, and obtain others more efficient and reliable ? This question proceeding, as I suppose it does, from inexperience, is rational. I have, therefore, no complaint to make at its being put, and no objection to answering it.

It is well known by those who have had experience in the management of public works everywhere, that delay and advances in prices always attend relettings. It is especially so in the South, where contractors for masonry are scarce, and for large jobs we are compelled, I regret to say, to look to the North for them. The question then presented for consideration, upon the occurrence of the failure of a contractor to prosecute his work with such a force as will ensure its completion by the time stipulated in his contract, is an alternative one, and it is, Whether it is best to submit to the evident delay arising from his delinquency, or Whether it would be better to abandon the contract ? In deciding upon this alternative, reference is always had to the character of the contractor, and by this guide for our action, in some cases the contracts have been abandoned, and in others they have been continued, always under renewed assurances of increased exertions from the contractors. Experience has proven, although it has been attended with the delay of the work, that indulgence was the best policy ; for, upon the abandonment of a contract, we have scarcely ever succeeded in the reletting in obtaining a better contractor, or in lessening the time for the completion of the work. Many contracts have been abandoned as often as four times, and each suc-

cessive contractor proving as inefficient as his predecessor. Others may think they could have devised more efficient means for the prosecution of the work; but I believe any set of men, surrounded by circumstances such as those who have had charge of the work have had to contend with, would, in all cases, have pursued the same course and the same policy.

In this connection I will transcribe from my report, accompanying the 15th annual report, page 23, the following paragraph, which is applicable to every part of the line:

“The chief cause of disappointment and delay in the progress of the work, may be ascribed at once to the want of means on the part of the contractors, who, with but few exceptions, soon exhausted their own resources, which were greatly disproportionate to the magnitude of their undertakings. They were then dependent on their monthly estimates, which, with the reservation of twenty per cent., proved inadequate to their wants, especially on the contracts for masonry, on which a large outlay is always incurred in the opening of quarries and the preparation of materials, which cannot be taken into the monthly estimates, and can be only realized in the more advanced stage of the contracts, when the masonry is in progress, and the full contract prices estimated on the cubic yard. In the embarrassed state of the contractors, consequent upon this state of things, temporary advances were frequently made out of the reserved twenty per cent., but generally too late, when credit and confidence were lost, and without the hope of recovery from the means thus acquired.

“Under these circumstances, it was found impossible to control and direct the progress of the work. The alternative constantly presented has been, on the one hand, whether to submit to the evident tendency of these difficulties and embarrassments to protract the work, or on the other hand, whether to abandon the contracts, with the inevitable delay and additional cost always attending a reletting. In the majority of cases, the more temporizing course of the two was pursued, without however relaxing in a proper exercise of authority to press the work forward.”

Such has been the course that was pursued, when it appeared that means alone were wanting, advances of a portion of the reserved twenty per cent. were made; in other cases the contracts were abandoned. At the North, where there is a numerous class of professional contractors, and where the emigrant population affords a superabundance of labor, which can be gathered up on a short notice, the penalty of abandonment may always be visited upon the tardy and backward contractors; and probably there the latter would be the proper course in all cases. But it is not so in Virginia, where contractors as well as laborers are scarce.

## II. THE RIVANNA CONNECTION.

This important auxiliary work, which gives to a rich section of country a participation in the benefits of the canal, and which it is believed will contribute largely to swell the amount of tolls, was com-



pleted on the first day of November. The cost has exceeded the estimate, owing to the land damages exceeding the amount that was estimated, and to the enlargement of the prism of the canal to make it correspond to the works contemplated by the Rivanna navigation company, which are now under contract to Shadwell's, with a capacity of locks and a depth of water sufficient for the largest class of boats navigating the canal.

### III. THE SOUTHSIDE CONNECTIONS.

The new connection at Cartersville is completed.

The New Canton connection has been retarded in its prosecution by the delay in completing the Rivanna connection, which was relied upon by the contractor for the transportation of the stone for the piers and abutments, the most of which was gotten out during the last fall and winter from a quarry on its banks, three miles from the main canal. The work, it is hoped, will now progress without interruption. The superstructure is framed, and the completion of the entire job may be anticipated early in the ensuing summer.

The piers and abutments of the Hardwicksville connection have progressed steadily and uninterruptedly on company account; they will be completed in a few months, when the superstructure, which is already framed, will be raised.

The piers and abutments of the Bent creek connection are nearly completed. Mr. Abraham Bowers, who was the contractor for the superstructure, at the date of my last annual report, having made material alterations in the bill of timber which was furnished him, and failing to respond to my communications on the subject, his contract was abandoned on the 3d day of October 1851, and the work is now under contract to Mr. Samuel Ford, with a stipulation for its completion on the 1st of July next.

The original contracts for these several connections were within the estimates, but owing to the frequent relettings, (every successive letting enhancing the price,) their cost in the aggregate will exceed the estimates.

### IV. THE FIRST DIVISION.

It affords me great pleasure to state the success which has attended the *working* of this important portion of the canal during the past year. It is without a parallel in the history of canals in this country, and furnishes unmistakable evidence of the fact, that time, which crumbles works of greater solidity and pretension, lends its hand to consolidate and mature the works of a canal for endurance and resistance of its ravages.

But a single breach has occurred during the whole year, and that of a character so trivial as to be scarcely worthy of notice.

The distribution of the forces and the amount of labor performed are set forth in admirable detail in the report of the superintendent of repairs, hereto annexed, marked No. 1. Four locks were thoroughly



repaired and may now be pronounced better than when they were first completed; five were repaired temporarily, but so fully as to need no further repairs for four or five years.

During the repairs the levels were kept full by passing the water around the locks; and the work was so timed as to occasion very little interruption to the trade. Two locks were repaired at a time. The timbers were all framed and in place, the wastes were made around the locks, the boats were all previously freighted above and passed down, the work of repairs was then commenced, and was completed by the time the boats returned with their upward bound cargoes—then there was an intermission until they passed down again, when two more locks were taken in hand. And thus, during the dull season of trade in May and June, all the locks may be repaired with little or no interruption to the navigation of the canal.

The season has been marked by unusual health. No death has occurred. And for one hundred and five hands, a physician has been employed but five times.

No interruption has been caused to the navigation by high water nor by ice. During the dry weather in October, there was a scarcity of water in Maiden's Adventure pond, owing to the leakage of the dam.

The work, regarded as a whole, taking into consideration the consolidation of the embankments and the renewal of many of the imperfect culverts, is at this time in a better condition than at any previous period since the opening of the canal.

The contract with Mr. R. L. Moore for a stone dam in front of the old dam at Maiden's Adventure, which I reported in my last annual report as being in progress, was abandoned on the twenty-eighth day of May.

The materials for its construction will be prepared during the winter on company account, and the building will be commenced the ensuing season.

#### V. THE SECOND DIVISION.

This division extends from the town of Lynchburg to Buchanan. On the 1st day of October it was opened for transportation to the mouth of North river. The boats will pass through the remaining portion to the town of Buchanan on the 21st day of the present month.

It is due to a faithful history of this work, and to myself as well as to others, that I should here state the condition of the work and the plans which I found in the office when I took charge of it as the chief engineer of the company in 1847.

Between Lynchburg and the North river, prior to the abandonment of the work in 1842, the towing path along the ponds and the trunk of the canal, with the exception of the enlargement of a small portion of the old Blue Ridge canal, had been formed and excavated. The fresh of 1842, and subsequent freshes prior to the resumption of the work in 1847, destroyed a large portion of this work. Locks Nos. 1,

2, 5 and 8 were raised about five feet above the foundation. The guard lock at Judith dam was raised four feet on one wall and six on the other. The foundation timbers of locks Nos. 3, 7 and 9 had been laid. The guard lock at Bald Eagle dam was completed, and the river lock commenced. The guard lock at Big Island dam and lock No. 12 were nearly finished. Locks Nos. 13 and 15 were completed, with the exception of the plank lining. All the locks which were completed were built of hammer-dressed rubble masonry lined with plank; and all except locks Nos. 11 and 12, which were to have been of cut stone, were designed upon the same plan, which will be more fully understood by reference to the specifications hereto annexed, marked No. 2, from which it will be seen that the walls under the coping were to have been six feet thick. The plan was changed by me from rubble masonry lined with plank to stone locks, and the walls reduced from six to four feet under the coping. See the specification hereto annexed, marked No. 3. In conformity with this specification, locks Nos. 1 and 2 (which as before stated had been commenced,) were completed from the lower water line; and also in conformity thereto the following locks were constructed, viz: locks Nos. 3, 4, 6, 11, 14, and guard locks at Judith dam, Pedlar dam, Coleman's Falls dam, and the Blue Ridge dam. Locks Nos. 5 and 7 are built of hammer-dressed rubble masonry. Lock No. 10 was built in accordance with specification marked No. 2, before referred to in the Appendix.

The guard lock at Judith dam, and the head, wing and recess walls of the guard locks at Bald Eagle and Big Island dams, which had been built with furrings let into the walls for the plank lining to be nailed to, were pulled down and rebuilt in accordance with the specification in the Appendix, marked No. 3. The body of the locks remain as they were built prior to the abandonment of the work in 1842. Lock No. 8 was completed in accordance with the plan upon which it had been commenced, heretofore referred to. Locks Nos. 9, 16 and 17 have been built in accordance with the specification hereto annexed, marked No. 4. Plans for all the locks on the portion of the division between Lynchburg and North river, on which work had been commenced, were found in the office. Also, plans of Judith dam and Bald Eagle dam, specifications of which are hereto annexed, marked No. 5. The plans and specifications for the locks were changed by me as before stated. The dams were built in accordance with plans on file in the company's office, and in conformity to specification marked No. 6, hereto annexed. I would here observe that some alteration was made in the specification in the rear course of masonry in Bald Eagle dam, and also in Pedlar and Big Island dams. For a statement of further changes, and for the reasons which influenced me in making them, as also those above mentioned, I beg leave to quote from my annual report, page 29 of the 15th annual report, the following remarks:

"The estimates of the cost of the canal from Lynchburg to North river were made prior to my appointment to the office of chief engineer, and were predicated upon the construction of locks of rubble masonry, lined with plank and resting on foundations of timber, and

on an inner slope of embankments of one and a half feet base to one foot rise, and on embankments of earth, to prevent breaches from freshes behind the abutments of the dams and between the abutments and the guard locks.

"When it became my duty as the chief engineer of the company to examine more minutely the plans and estimates of the work, I found that the cost of the locks on plans proposed in the estimates, would be very nearly as great as the cost of stone locks, and the former being comparatively temporary, I had no hesitation in recommending the adoption of stone locks, and in many instances where the estimates contemplated timber foundations resting on earth, upon excavating the pit down to the proper level of the timber bottoms, the earth proved to be of such a treacherous character that I extended the foundations down to the rock. I changed the interior slopes of the embankment with a few exceptions, from one and a half to one, to a slope corresponding to a base of two feet for every foot perpendicular rise. I recommended guard walls of masonry carried down generally to a rock foundation on one side of the dam uniting the abutments and guard locks, and on the other running into the firm clay soil, or abutting against the rocky lining of the hills which limit the low grounds bordering on the river, in lieu of the mounds of earth above, provided for in the estimates to guard against breaches behind the abutments of the dams, which safeguards, unstable and uncertain at best, would be especially objectionable when composed of sandy alluvium, resting on materials of the same kind, and those again underlaid by gravel, as would be the case in almost every instance from Lynchburg to North river. And admonished by the great fresh of 1847, which swept far above the contemplated height of the embankments, they have been raised above the reach of a similar fresh, and beyond the influences of a much higher rise in the river. This increase in the height of the embankments involved a corresponding elevation of the head wall and the wings of the guard locks and guard walls."\*

It was originally contemplated to build all the dams of stone. Owing to the great expense that would have been incurred in procuring stone of a suitable quality, I built Coleman's Falls dam and rebuilt Cushaw and Blue Ridge dams with timber.

The work had progressed so far that but few changes in the location, if any had been desirable, could be made. I changed the location of Big Island dam from a quarter of a mile below the guard lock which had been built, to a more suitable site on a ledge of rock on a line with the head of the guard lock. At Bald Eagle shoals the guard lock was built 100 feet above the proper site for the dam. I united the abutments of the dam with the guard lock by a stone wall running obliquely up the river to a line with the head of the guard lock, and thence to a union with it. It has been a matter of regret with me that I did not pull down the old guard lock and build another with its

\* In the above quotation, where Buchanan occurs in the original, I have substituted North river, in order to make it more directly applicable to the line of works which had been commenced prior to my becoming the chief engineer of the company.

head wings on a line with the prolongation of the comb of the dam, the site of which was fixed by the ledge of rock forming the Bald Eagle shoals. At Roache's island a dam was contemplated on each side of the island, of stone on a gravel foundation with a curved face cut smooth. For greater security I placed the dam on a solid foundation of rock at Coleman's falls, one-third of a mile below the island.

Between North river and Buchanan, all the locks are built of limestone rock, in accordance with the specification heretofore referred to, marked No. 3. When I took charge of the work no definite location on this part of the line had been made. An estimate had been submitted by my predecessor, Mr. Ellet, for locks of wood and stone like those on the first division, and for the plan of a continuous canal from the head of the Blue Ridge pond. This line was broken by me with the sanction of the board, into a mixed improvement of locks and dams and canal, by which very great difficulties, which had not been fully appreciated and estimated, were overcome. On this division the expenditures have exceeded the estimates by an amount between one hundred and a hundred and twenty thousand dollars. The precise sum cannot be ascertained until the accounts of the contractors are closed. This is owing, first, to the frequent abandonment of the contracts, and the consequent increase of prices in the relettings; secondly, to the expense incurred in making a heavy embankment, and in sinking the foundation and building a portion of the northern abutment of the towing path bridge, which is contemplated at a future day at the head of Cushaw pond just above the Blue Ridge ferry, better known as the Rope ferry, which was not embraced in the estimates; thirdly, to unforeseen difficulties incurred in obtaining a foundation for Cedar creek aqueduct; and fourthly, the repairs of the breach in Judith dam, which was commenced on the first of February and completed on the eighth of September.

As this portion of the improvement is now completed, it may be interesting to the company to be informed as to the character, extent and value of the work which has been done. I therefore deem it proper in this place to give a descriptive account of it, which I will do as briefly as possible.

It commences at the Water Works dam, half a mile and 16 yards above the corporation limits of the town of Lynchburg. The *first* level passes through the pond formed by the reflux water of the Water Works dam, a distance of  $1\frac{1}{4}$  miles and 88 yards. The towing path is formed 10 feet above the comb of the dam at the base of the rocky bluffs, which extend nearly from one end of it to the other; three small square stone drains pass under it and one paved drain over it.

We ascend from the river to the *second* level, three-quarters of a mile and 264 yards in length, by lock No. 1 of 12.72 feet lift. Upon this level there is one waste weir 60 feet in length, and one culvert over Pigeon creek of 15 feet span, with a waste over each parapet wall. The waste weir is built in accordance with the specification hereto annexed, marked No. 7, and the culverts in accordance with specification marked No. 8. I will here remark, to avoid repetition,

that the wastes and culverts, with slight changes to suit localities, are all built in conformity to the foregoing specifications. In the excavation on this level, two bluffs are encountered; at those points the width of the canal is contracted to 35 feet; at all other places throughout the whole division, the width is 50 feet on the surface.

The *third* level extends from lock No. 2, which has a lift of 12.72 feet, to Judith dam, and is one mile 176 yards in length. Upon this level there is a culvert over Sugar Tree creek of two spans of eight feet each. The excavation was of sand and clay, such as is found at the intersection of the hill sides with the low grounds all along the river. Judith dam (as also Bald Eagle, Pedlar and Big Island dams) is built of stone; its length between the abutments is 419 feet; the abutment on the north side consists of a cliff of rock; the other, contiguous to the canal, is built of hydraulic masonry, and is connected by a circular wing wall 256½ feet long, also of hydraulic masonry, with the head walls of the guard lock. The dam, the guard lock, and all the masonry in connection therewith, is founded on solid rock. The base of the dam is 26 feet in breadth; the foundation is from 7 to 10 feet below low water mark; the greatest height above the foundation is 33 feet; the average height is 26 feet; the thickness under the coping 11 feet; and the coping is 9½ feet in length, no piece being less than three feet wide; all 16 inches thick—cramped together and bolted to the dam by iron bolts 1½ inches diameter and four feet long, leaded from bottom to top. Through the guard lock, which has a lift of 1.25 feet, the line enters upon the reflux water of the dam, which affords slack water navigation for a distance of four miles. The towing path for one mile is formed by heavy rock excavation, through projecting points of cliff, and on the slopes of steep rocky hill sides; for the remainder of the distance it is uplifted above the water by high embankments of earth and rock, under which there are seven square drains of three feet span each, and two tow-path bridges—one across Judith creek of 35 feet span, and one across Wide Mouth creek of 30 feet span. The superstructure is of wood resting on stone abutments.

By lock No. 3, which has a lift of 18 feet, the line is raised to the *fourth* level, which is three-quarters of a mile and 264 yards in length, and extends to Bald Eagle dam. On this level several ponds are taken in, which give to the surface of the canal an expanse, which as in the ponds present no greater resistance to the passage of boats than the displacement of the water. The excavation consists of sand mixed with gravel.

The Bald Eagle dam is 498 feet between the abutments; 14 feet thick at the base; seven feet thick under the coping, which is 6½ feet long and 16 inches thick, securely cramped and bolted to the dam. Both abutments are artificial. They are built of the best description of rock work masonry, with a wing wall on one side 108 feet in length, running to the rocky hill side of the river—the other, 261 feet long, uniting the abutments with the wing wall of the guard lock. For 2½ miles and 176 yards the reflux water is used for navigation. For one half of this distance the towing path is excavated through



solid rock ; in many places its whole width is benched into the rock ; for the remainder of the distance the excavation was of clay intermixed with gravel and boulders.

There are on this towing path six square drains of three feet span each, and two paved drains for passing small branches over the tow path.

The *fifth* level extends from lock No. 4, which has a lift of 13 feet, to Pedlar dam, and is  $\frac{1}{2}$  a mile long.

The dam is  $454\frac{1}{2}$  feet in length between the abutments ; the breadth at the base is 15 feet ; the height is 18 feet ; the thickness under the coping, the fastenings, and the dimensions of the coping are the same as in Bald Eagle dam. The abutment on the north side is of solid rock ; on the side next to the guard lock it is built of hydraulic masonry, and is united with the guard lock by a wall  $66\frac{1}{2}$  feet long. For the protection of boats entering the canal, a pier head 200 feet in length, constructed of river rock and rubbish from the adjacent quarries, walled all around, runs up from the wing of the guard lock on a line parallel to a tangent to the towing path which unites with the guard lock on a curve.

After passing through the guard lock, which has a lift of 1.25 feet, the reflux water from the dam forms slackwater for a distance of  $1\frac{1}{2}$  miles and 352 yards. The towing path is 10 feet above the comb of the dam, and, being liable to submergents in high freshes, the embankments are securely rip-rapped on both sides where it is not excavated in the rock, as is the case for  $\frac{1}{2}$  a mile, and the top surface is macadamized. There are five square drains under the tow path. By lock No. 5 we rise 16 feet to the *sixth* level, which is  $\frac{1}{2}$  a mile and 176 yards long, and extends to Coleman's Falls dam. Two small streams are taken into this level, which are discharged over a tumbling waste, constructed with great difficulty, in which there are also drawgates or wickets for the discharge of the sudden and heavy summer rains.

Coleman's Falls dam, at the head of this level, is constructed of timber, for a particular description of which I beg leave to refer to the specification hereto annexed, marked No. 9 ; and I will here take occasion to observe that the Blue Ridge, Quarry Falls, Varney's Falls, Indian Rock and Wasp Rock dams, which will be mentioned hereafter, are all built after the same plan and specifications. Coleman's Falls dam is 354 feet in length between the abutments ; on the north side the timbers abut against a bluff of solid rock ; on the side contiguous to the canal, against an abutment of masonry which is connected with the guard lock by a wall 218 feet long. The lower timbers of the dam (and so of the lower timbers of the dams above named) are bolted to the solid rock, and the abutments of masonry and the connecting walls are founded on rock. The base of this dam is 30 feet in breadth, and the height of the comb above the foundation is 18 feet ; the back range of timbers is 9 feet above the foundation, which gives the slope of the sheeting on top an angle of  $17\frac{1}{2}$  degrees. The reflux water from this dam affords 3 miles and 352 yards of slack water navigation. The towing path for one mile is benched out of the sides of rocky and precipitous cliffs ; for the remainder of

the distance it is formed by side cutting in rocky hill sides and excavation for the embankment in clay and easy alluvial soil; it crosses Indian Camp creek by a substantial stone culvert of 16 feet span; Reed creek by a bridge of timber structure of 50 feet span; two other streams are crossed by bridges of similar structure, with spans of 20 to 26 feet. There are 10 square drains under the towing path and 14 over drains.

At the end of the towing path we pass through lock No. 6, having a lift of 17 feet, to the *seventh* level.

This level extends to Big Island dam—is  $\frac{1}{2}$  miles and 58 yards long. The excavation through its whole extent was of sand.

Big Island dam is built of stone, as heretofore stated; it is 437 feet in length between the abutments; the abutment on the north side is the natural rock; on the side next to the canal it is of hydraulic masonry, united to the guard lock by a substantial stone wall, founded on rock 256 feet long. The height of the dam above the foundation is 14 feet; the base is 12 feet broad, and under the coping it is 8 feet thick; the coping is 7 feet in length.

The guard lock, by a lift of one foot, conveys us into the pond, which is made subservient to navigation for a distance of one mile and 176 yards. The towing path crosses Hunting and Battery creeks, the first by a bridge of 50 feet span, the latter by one of 20 feet. There are 3 square drains passing under it, and 4 paved drains over it. The excavation, except at one point, where rock was encountered, was through common earth.

From the pond we ascend to the *eighth* level of  $\frac{1}{2}$  mile 352 yards in length, by lock No. 7, of 13 feet lift. Lock No. 8 raises us 8 feet to the *ninth* level, which is  $\frac{1}{2}$  mile long. The excavation was of earth, except for 300 feet, where rock was encountered. Upon this level there is one culvert, of 12 feet span, over Peters' creek; near the upper end it enters the old Blue Ridge canal.

Lock No. 9, of 8 feet lift, conducts the line to the *tenth* level, which is  $\frac{1}{2}$  mile and 352 yards long. The whole of this level was swept off by the fresh of 1842. In rebuilding it, the excavation for the formation of the embankment was of sand mixed with clay and gravel.

Passing lock No. 10, of 9 feet lift, we reach the *eleventh* level, which is  $1\frac{1}{4}$  miles and 80 yards long, and extends to the Cushaw falls. Upon this level there is a waste weir 42 feet long, and a culvert of 12 feet span over Snow creek. Heavy rock excavation was encountered on this level from one end of it to the other. The clay which forms the embankment on the towing path side of the canal, and with which the bottom was lined, was precipitated from the top of the overhanging cliffs. At Cushaw falls, an old dam of the Blue Ridge canal was reconstructed. This dam has been extended on the north side, a distance of 289 feet, and the old part, 554 feet long, repaired and raised, so as for the present, and for some years to come, it may be relied upon to supply the canal with water.

By lock No. 11, of 5 feet lift, which serves also for a guard lock, we ascend to the reflux water from the Cushaw dam, through which the *twelfth* level passes, a distance of  $\frac{1}{4}$  mile and 88 yards, to a point

opposite lock No. 12, 75 yards above the Blue Ridge ferry, where the line crosses to the north side of the river by a rope ferry, which, at a subsequent day, will be substituted by a towing path bridge, the embankment for which has been made, the rock for the foundation of the piers leveled off, and the abutments raised above low water. There is one square drain under the towing path. The towing path itself is formed of earth mixed with slate rock from the sides of the mountain, and of a similar material from the excavation for the channel, in which there was also encountered some large boulders and rocky ledges.

The *thirteenth* level is attained through lock No. 12, of 11.12 feet lift. It is  $\frac{1}{4}$  mile and 88 yards in length.

From the *thirteenth* to the *fourteenth* level we pass through lock No. 13, of 11.12 feet lift. The length of the *fourteenth* level is one mile and 176 yards. The excavation was of a slaty soil mixed with rock. There is one waste weir upon it, 42 feet long.

Lock No. 14, by which the ascent to the *fifteenth* level is made, has a lift of 8 feet. Upon this level, which is  $\frac{3}{4}$  mile and 126 yards long, there is one waste weir 30 feet in length; the excavation was made through clay, slate and gravel, and through some projecting points of cliffs.

Lock No. 15 has a lift of 8 feet, and conducts to the *sixteenth* level. This level is  $\frac{1}{2}$  mile in length. It is made around precipitous bluffs, and is protected from the river by a vertical wall 20 feet high.

The work is now fairly in the pass of the Blue Ridge amid the most imposing scenery.

Through lock No. 16, of 8 feet lift, we ascend to the *seventeenth* level. This is a short level, being only 352 yards in length. The same difficulties are encountered, and the same protection from the river is resorted to as in the preceding level.

By lock No. 17, of 9 feet lift, we ascend to the *eighteenth* level, which extends to the Blue Ridge dam, and is  $1\frac{1}{4}$  miles and 85 yards long. This level goes around the Balcony rock, and completes the pass of the Blue Ridge. It is overhung by a gigantic cliff on one side, and on the other uplifted and supported by a massive stone wall, to raise and protect it from the river.

The Blue Ridge dam is placed near the western base of the mountain, from which it takes its name, just below the confluence of the North and the James rivers. Its length between the abutments is 455 feet, and its height is 13 feet; the thickness of the base is fifteen feet; the length of the wall between the north abutment of the dam and the head of the guard lock is 120 feet. It is constructed in all respects similar to the Coleman's Falls dam. But the materials are not of as good quality. It was constructed in great haste immediately after the fresh of 1847, which carried away the old dam built for the Blue Ridge canal, and was intended as a temporary structure to supply water power for the manufacture of cement. The design at this time was to build a stone dam in front of it. But in the progress of the preparation for the reconstruction of the dam, the stone dam was abandoned on account of the difficulty of procuring suitable materials.



It was then determined to strengthen the temporary structure so as to make it a permanent work by itself. Still it is not so strong as the other dams. I am however confident that it may be relied upon for twenty years at least. About this period it may be necessary to carry out the original design of building a stone dam in front of it and filling in between it and the present dam with concrete. The reflux water from this dam forms slack water navigation for the distance of  $1\frac{1}{2}$  miles and 307 yards. The towing path crosses North river by a bridge of two spans of  $126\frac{1}{2}$  feet each. This bridge is also provided with a roadway track over which the company are authorized to charge tolls. The towing path is a continuous embankment formed of clay mixed with stone, until it passes North river; and for this distance, which is 396 yards, the approach to the guard lock is protected by an embankment securely riprapped, the greater part of which formed the embankment for the Blue Ridge canal. The embankment, under which there are three stone drains, consists of light alluvial soil excavated from the bank of the river. By lock No. 18 we ascend 14.6 feet to the *nineteenth* level, which is  $\frac{1}{2}$  mile and 71 yards in length. This level encounters heavy excavation through indurated clay and gravel for about half a mile. But for the remaining distance the excavation was of sand and common clay. At its termination, a dam, known as Quarry Falls dam, is constructed of timber. This dam is 16 feet in height from the foundation; it is 21 feet in breadth at the base, and 323 feet in length between the abutments— $270\frac{1}{2}$  feet are constructed of timber, and  $52\frac{1}{2}$  feet of stone. Both abutments are of hydraulic masonry. The abutment on the north side is united with the guard lock by a wing wall 304 feet in length. On the south side the water is prevented from breaking behind the abutment by a wall extending into the river bank, and thence a guard bank formed of clay and riprapped extends across the low grounds of the river to the hill side. In the pond formed by the reflux water from the dam there are  $1\frac{1}{2}$  miles and 240 yards of slack water navigation. For half a mile the river bank is trimmed to the proper slope and riprapped, to form the towing path; for the remaining distance, with the exception of two points where rock excavation is encountered, the embankment is made with clay obtained from the hill sides, and hauled from  $\frac{1}{4}$  to  $\frac{1}{2}$  a mile. There are two bridges across the tow path—one at Crawford's run of 20 feet span, and the other at Branfford's run of 14 feet span.

Lock No. 19, which has a lift of 13 feet, conducts the line to the *twentieth* level, which is 337 yards long. Passing lock No. 20, of 7 feet lift, we reach the *twenty-first* level, which is  $1\frac{1}{2}$  mile and 42 yards in length. Upon this level there is one culvert of 6 feet span, and one farm bridge. The excavation was a light alluvial soil. Through lock No. 21 we rise 8 feet to the *twenty-second* level. The length of this level is 1 mile and 205 yards. The excavation is the same as in the preceding level. The works of art consist of one culvert of 6 feet span, one waste weir 30 feet long, and one aqueduct. The aqueduct upon this level crosses Cedar creek. The masonry of the abutments is of the character denominated rock work. The foundation of the western abutment was sunk 10 feet below the bed of the creek, and

the foundation of the eastern abutment  $16\frac{1}{2}$  feet. The span is 50 feet. The superstructure is of timber, suspended on ten wire cables, securely anchored in vaults, prepared for the purpose, in the masonry.

Lock No. 22 raises us 10 feet to the *twenty-third* level, which extends to Varney's Falls dam, and is 2 miles 105 yards long. For the distance of  $\frac{1}{2}$  a mile this level is conducted around a heavy rock bluff, at great expense for rock excavation and protection walls; the excavation for the remaining distance was of red clay. There are two culverts on this level, one of 6 and the other of 10 feet span. Varney's Falls dam is 18 feet in height, the base is 24 feet in breadth, and its length is 488.5 feet between the abutments. The abutment on the south side is a ledge of rock; on the side contiguous to the lock it is built of hydraulic masonry, and is united with the guard lock by a wall 83 feet in length. We pass through the guard lock to the pond formed by the reflux water from the dam, which affords 3 miles and 120 yards of slack water navigation. The towing path is crossed by 2 bridges of 10 feet span each, and 1 of 30 feet span, and by 2 square drains; on 2 miles and 120 yards the excavation was alluvial soil, with some sand and gravel. The remaining 1 mile is along a steep, rocky hill side skirting the river, broken by occasional bluffs, where the excavation was principally of rock. By lock No. 23, which has a lift of  $15\frac{1}{4}$  feet, the line is raised to the *twenty-fourth* level, which is 283 yards in length. Lock No. 24 has a lift of 8 feet, and opens on the *twenty-fifth* level, which extends 1 mile and 90 yards to the Indian Rock dam. The excavation was clay and alluvial soil. Upon this level there is one farm bridge. Indian Rock dam is constructed in all its parts similar to that at Varney's Falls; it is  $613\frac{1}{2}$  feet in length between the abutments, 19 feet in height, and 24 feet in thickness at the base. The abutments are of hydraulic masonry; the wing uniting the abutments on the north side with the guard lock is 58 feet long. For the protection of boats entering the canal, a pier head 335 feet in length has been built from the wing wall, uniting the abutment of the dam and the guard lock. Between this pier head and the towing path we enter the pond formed by the reflux water from the dam by a rise of 3 feet through the guard lock, and for a distance of  $2\frac{1}{2}$  miles and  $366\frac{1}{2}$  yards we have slack water navigation. Perpendicular cliffs, rocky hill sides and precipitous banks were the obstacles opposed to the formation of the towing path at almost every step. Indian Rock, just above the dam (from which it takes its name) presented the most formidable barrier, which was overcome by blasting to a depth of 60 feet through the point which projected into the river. The cost of these formidable difficulties was further increased in the formation of the towing path, by the construction of 2 bridges of 40 and 20 feet span, respectively, and 1 square drain.

By lock No. 25 of  $16\frac{1}{2}$  feet lift, we ascend to the *twenty-sixth* level, which is  $\frac{1}{2}$  mile and  $90\frac{1}{2}$  yards in length.

The *twenty-seventh* and last level on this division, extends from lock No. 26, which has a lift of 9 feet, to Wasp Rock dam, and is 1 mile and  $73\frac{1}{2}$  yards in length. The excavation on this as well as on the preceding level, was alluvial soil mixed with clay and gravel.

Wasp Rock dam is also similar in its construction and protections to Varney's Falls dam. Its length between the abutments is  $384\frac{1}{2}$  feet, its height 23 feet, and its base 32 feet in thickness. The guard lock has a lift of 1 foot. The reflux water from the dam extends to lock No. 1 on the third division, opposite the western boundary of the town of Buchanan, and affords slack water navigation for a distance of  $2\frac{1}{2}$  miles and 30 yards. The tow path is formed at an average elevation of 22 feet above the comb of the dam. It is carried around Wasp Rock by a vertical wall 19 feet high and 150 feet in length; thence for  $\frac{1}{2}$  mile the excavation was of rock; for the residue of the distance, except at a cliff just below the town of Pattonsburg, (which is opposite Buchanan,) where some rock excavation was encountered, it consists of clay and sand mixed with stone and gravel. There are 6 square drains passing under the towing path, 4 paved drains over it, and one towing path across Purgatory creek of 42 feet span.

A gauge dock has been constructed at the town of Buchanan and also one at North river.

The slopes of the embankments where exposed to the action of the river, have been securely protected by riprap. Upon this division there are 27 miles and 613 yards of slack water navigation and 22 miles and 355 yards of canal navigation, making in the aggregate a total length of 49 miles and 998 yards. There are 4 stone dams, 7 timber dams, 38 locks having a total lift of  $297\frac{5}{8}$  feet; 1 aqueduct of 50 feet span, 1 culvert of 15 feet span, 1 with two arches of 8 feet span each, 2 of 12 feet span, 1 of 10 feet span, and 3 of 6 feet span; 48 square drains, 17 towing-path bridges, 2 farm bridges, and 6 waste weirs. The aggregate number of cubic yards of masonry in these various works of art is

A long time has been occupied in the execution of the work; but it must be borne in mind that a great deal has been done, and that with the exception of the division embracing the summit level, this division has always been considered more difficult than any other on the whole line of the company's improvement. We had to contend with an almost unbroken chain of steep, rocky hill sides, precipitous cliffs and mural precipices. Every foot of the way had to be guarded and protected from the river. Although it might perhaps come with more propriety from some one else, I will myself here take occasion to say that the works are in plan everywhere well adapted to the difficulties to be overcome, and that in the execution they ensure permanency and stability.

The cement which has been used in the work has been manufactured on the line under the superintendence of Mr. A. B. McFarlan, to whose report, marked No. 10, herewith annexed, I beg leave to refer. Under my instructions he has been constantly engaged in submitting it to a variety of tests, which have resulted in proving it to be equal to any cement in the country. These tests were not only applied to the cement at the mill when fresh ground, but specimens for trial were taken from the bags after being filled for transportation, and also after they reached their destination at the several jobs. Mortar was also taken from the mortar beds as it was mixed for the various works of art, and

stone cemented together, which after a lapse of time were torn asunder by an ascertained force. In this way its tenacity as it passed into the work was ascertained. The various proofs to which it has been almost daily subjected for a period of three years, are all recorded in a book, which will be deposited in the company's office and will be useful in the further progress of the work. I have also arranged a cabinet containing specimens of the various descriptions of rock and sand used in the construction of all the works of art on this division and of the foundations of these structures, which will serve as a useful guide should the materials in any of the works or in the foundations prove defective.

In short, every care and precaution have been taken and every pains bestowed, not only to ensure the faithful construction of the work, but to obtain lasting and durable materials; and I am greatly mistaken if we have not been successful in our efforts.

In closing this section of the report, I should be doing injustice to my feelings if I did not take this occasion to acknowledge the fidelity and attention of the assistant engineers, and especially the untiring energy, zeal, skill and intelligence of D. S. Walton, Esq., the principal assistant engineer. To Mr. James M. Harris, the assistant engineer, and to Mr. J. L. Adams, superintendent, also great credit is due for their unremitted attention in the management of the repairs of Judith dam. Indeed, all engaged therein did their duty and are deserving of commendation.

#### VI. THE THIRD DIVISION.

This division extends from Buchanan to Covington. The location is not yet definitely fixed upon. I am, therefore, not prepared to submit an estimate of its cost. A tunnel which occurs 6 miles and 510 yards above Buchanan, designated in previous reports as Ritchie's tunnel, a guard lock at its western entrance, two lift locks and three dams with their guard locks have been let.

#### VII. THE FOURTH DIVISION.

Upon this division, which embraces the pass of the Alleghany, a corps of engineers, in charge of E. Lorraine, Esq. have been actively engaged during the past season in surveying the summit level and the feeders for its supply. They are now occupied in plotting their work, preparing the plans, and estimating the cost of the improvement. When completed, the facts (in accordance with my recommendation adopted by the president and directors) will be laid before a board of engineers. This course I thought it most proper to pursue, for the reason that inasmuch as I had expressed my opinion as to the feasibility and practicability of carrying the water line across the Alleghany, I was apprehensive that a report from me might not carry with it that force and weight to which the facts would entitle it, especially with those who have preferred to doubt its practicability despite of all the facts and reasoning which have from time to time, during the last 25 years, been submitted upon the subject.

The surveys fully sustain the remark made by me in my report when president of the company, "That a cursory reconnoissance of the summit level and of the neighboring localities left with me the conviction that the facilities for its adequate supply had been greatly underrated," and fully supports the opinion I have expressed of the capacity of the reservoirs for holding water. The report of professor Tuomey, the eminent geologist, who has made an examination of the ground, will satisfy all skeptics on this point. The whole subject will be laid before you at an early day, with such an array of facts and results as will forever settle the question of the practicability of carrying the canal over the summit level. The cost of the supply of the summit level, together with the cost of the water line from Covington to the head of steamboat navigation on the Kanawha, will, I am confident, be considerably less than the cost of a railroad between the same points. And as a railroad between these points has been from time to time proposed and pressed upon the company as a part of their improvement, I feel it to be my imperious duty to express my opinion as to its cost, and furthermore, as to the impolicy of superseding the canal by such an improvement.

From a comparison of the difficulties to be overcome in the construction of a railroad from Covington to Loup creek shoals, with those which have been encountered on the Hudson river railroad, I am convinced that they are much greater on the former than on the latter.

The Hudson river railroad with a single track, partially graded for a double track, with a grade line only five feet above the water, except in the cut off through the high lands, the rock excavation chiefly side cuts, the tunnels, five in all, varying from 200 to only 1000 feet in length, with not one single viaduct, has just been completed at a cost of \$10,000,000, or \$71,428 per mile, and that too chiefly under the superintendence of William C. Young, Esq., one of the most eminent railroad engineers in the country. Now I am sure that a railway with a single track, (not graded for a double track,)\* from Covington to Loup creek shoals, will not cost less than \$70,000 per mile. On the route which Mr. Ellet recommended as being the shortest, presenting the lowest summit and the lightest grades, with the difficulties to be encountered, arising from the necessity of laying the grades high up on the face of precipitous cliffs, there are 38 viaducts and 8 tunnels, one of which is 2 miles and 836 yards in length, and one 1 mile and 792 yards, which, added to the remaining six, make an aggregate of 5 miles 325 yards of tunneling, besides an unprecedented amount of heavy protection walls, some of them formed by blasting rocks from the overhanging cliffs one thousand feet in height. Taking all in all, there is not a railroad in the world which, for the same extent, com-

\* "Upon a single track railroad, there can be but a limited amount of business done with regularity and safety; and as the cost of transportation on railroads, as in nearly every other business, but probably to a greater extent on railroads, decreases with its amount, it follows that the minimum cost of carriage cannot be reached until the means for the transportation of the maximum quantity is afforded."

See the report of J. Edgar Thompson, Esq., chief engineer and general superintendent of the Pennsylvania railroad, appended to the fourth annual report of the company.



bines so many difficulties and involves so great an expenditure in its construction. And the estimate which I have here made must stand as the minimum cost, until disproved by an *actual location* made by a competent practical engineer, one who has had experience in the construction of railroads; none other is competent to make an estimate, and no engineer can make a correct estimate on an experimental line. In relation to a railroad through Virginia to the Ohio, I have in a former report given my views, and endeavored to shew that it could not command the through travel and the light tonnage; that consequently it would be incapable of bearing the burden of transporting the gross products of the earth or the heavy tonnage, and therefore it would fail in the essential prerequisite of developing the resources and adding to the wealth of the state. At that time I had in my eye, taking Cincinnati as the starting point, as she must be in the race of competition for the Western travel, the rival lines to New York, by Sandusky and by Cleaveland, the routes to Baltimore by Wheeling, and to Philadelphia by Pittsburg. Since then, "the right of way" question\* has been yielded up in Virginia. Baltimore has thus acquired a shorter route by 20 miles through Parkersburg to Cincinnati, than the route from Richmond to Cincinnati. And by the Hempfield railroad, chartered at the last session of the general assembly, the line from Philadelphia to Cincinnati has been shortened so as to make it only 59 miles longer than the railroad from Richmond to Cincinnati. Now, with the distance and time against her,† and both in favor of es-

\* The president of the Baltimore and Ohio railroad company, in his last annual report, after stating that the through travel and tonnage "have been seriously interfered with by the opening of the Erie railroad," says, in allusion to the charter passed at the last session of the general assembly of Virginia, granting the right of way to an independent company to connect the town of Parkersburg with the Baltimore and Ohio railroad, "The passage of this great charter could not have been more opportune than at this particular juncture, when so many and spirited efforts are being made to multiply and improve the means of communication between the Atlantic seaboard and the vast region lying west of the Ohio river. The right to connect the city of Baltimore by the most direct line, with the commercial city of the great west, (alluding to the city of Cincinnati,) was long the desire of those to whom had been entrusted the direction of the policy of this company." \* \* \*

"It is a source of congratulation, that in the midst of the preparations now going forward to compete for the western trade and travel, the city of Baltimore has been placed in a position under the recent legislation of Virginia, by the adoption of the Northwestern charter, and the construction of the important line of road which it contemplates, to defy all competition, and to offer facilities greater than those of any other road, connecting the great West and the Valley of the Mississippi with the Atlantic seaboard. The city of Baltimore has already evinced her appreciation of this important charter, by an application to the legislature for authority to subscribe to the capital stock of the company; and this board would urge that this subscription on the part of the city be met by a loan to the Northwestern company of the bonds of this company, to whatever extent may be required in furtherance of this object, so soon as their own work shall have been completed to the Ohio river. This road when completed will place the city of Baltimore in direct communication with Cincinnati by a continuous line of railway, requiring in the transit between the two points about 26 hours, assuming a rate of speed not exceeding 25 miles per hour."

† From Richmond to Cincinnati by the Virginia Central railroad, the distance is about 600 miles.  
 From Cincinnati to Baltimore via Richmond, the distance is 760 "  
 " " Philadelphia via Richmond, 858 "  
 " " New York via Richmond, 948 "  
 " " Boston via Richmond, 1163 "  
 " " Baltimore via the Baltimore and Ohio railroad via Parkersburg, the distance is 580 "  
 (Which can be reduced 10 miles by the Knobbly mountain cut off.)

established markets, no one will contend that Virginia can enter the competition upon a line of railway with any earthly hope of success. The Northern cities having the markets, and of course the trade and the travel, there would be nothing to sustain the railroad in Virginia.

There is but one way by which a railroad through Virginia to the Ohio can be maintained; and paradoxical as that may seem to the railway advocates, that way is to follow the example of New York and complete the canal. What New York was before her Erie canal was made, Virginia is now; that is, without commerce and without trade. She now has her Hudson river, her Erie, her Albany and Buffalo, her Harlem railroad to Albany, numberless other railroads, and her almost countless cities—all the offspring of her canal. New York is now in communication with the whole world. She is the empire state. It remains for Virginia to decide whether she will follow the example of New York, and reap the golden fruit which awaits her, or whether she will mount the “iron horse” in pursuit of a barren sceptre, for such would be her reward in careering over a line of railway which was not preceded by flourishing towns, by the “plough, the loom and the anvil.” A desolate waste reverberating the shrill whistle of the solitary locomotive on the lonely railway track, would signalize the folly of so willful a disregard of the salutary lesson which the rise, progress and success of the Erie canal teaches. Everybody will admit that Virginia can in no other way recover her position in commerce and take the high stand to which her great resources entitle her, than by developing those resources and building up a market within her borders. And no one will, I presume, contend that either can be effected by any system of railroad which can be devised, confined to her own borders. The wildest advocates of a railroad from Richmond to the Ohio river have never contended that it would stand any chance of success if confined to the products of the state. Their calculations are based chiefly on the trade of the west.

The history of our own country, without going further back, presents the fact that it is the introduction of the trade of neighboring states which confers political and commercial power.

From Cincinnati to Baltimore via the Baltimore and Ohio railroad via Wheeling, the distance is	635 miles
From Cincinnati to Philadelphia via the Ohio and Pennsylvania railroad via Pittsburgh, the distance is	683 “
From Cincinnati to Philadelphia via the Pennsylvania railroad via the Hempfield railroad via Wheeling, the distance is	659 “
From Cincinnati to New York via Cleveland and Dunkirk, the distance is	859 “
“ “ Boston via Cleveland, Buffalo and Albany, the distance is	970 “

A comparison of the above distances shews that the city of Baltimore by the Baltimore and Ohio railroad is 20 miles nearer Cincinnati than Richmond; that from Cincinnati to Baltimore via Richmond, the distance is 180 miles in favor of the direct route from Baltimore to Cincinnati; that from Cincinnati by Richmond to Philadelphia, the distance is 199 miles in favor of the direct route from Philadelphia by Wheeling to Cincinnati; that from Cincinnati to New York by Richmond, the distance is 89 miles in favor of the route by Dunkirk and Cleveland; that from Cincinnati to Boston by Richmond, the distance is 193 miles in favor of the route from Boston by Albany, Buffalo and Cleveland to Cincinnati.

Now the destination of the travel being to the cities north of Richmond, unless “the advantage of time and distance” be disregarded, the Virginia railroad cannot command it. The lake shore route from Cleveland to Dunkirk will be completed in the course of twelve months, when the journey between Cincinnati and New York will be performed in about 24 hours.

An emporium cannot be formed by the products of any one single state, however varied those products may be; and owing to the number of rival towns in Virginia contiguous to the seaboard, it would be impossible to concentrate the trade of the state on any one point. The commerce of other states being then an indispensable adjunct to a system of improvements for the development of our state, the question is, How is that to be obtained?

I have shewn that owing to rival improvements, having the advantages of time and distance, leading to established markets of import and export, commanding thereby the trade and travel of the great West, that a railroad from Richmond to the Ohio could not compete with them, and would therefore fail to accomplish the object.

The only possible way of effecting it, is to devise some cheaper mode of conveyance than is possessed by the rival cities of the North—some mode which they cannot rival, which will draw the trade, build up cities and towns, give activity to commerce, create travel, and thereby the necessity for a railroad for the accommodation of the travel, which, after all, ever follows and never loses sight of the gross products of the earth, howsoever sublimated and refined we may become in our ideas. As I have before intimated, that mode is water transportation; and any dispassionate man who will investigate the subject, will come to the same conclusion as to its advantages and the utter futility of attempting any other mode of improvement at this time.\*

\* The Baltimore and Ohio railroad is so often referred to by the advocates of railroads in Virginia, that I may be excused for drawing largely on the reports of that company. What they have to contend with, the line through Virginia will have to contend with; what they rely upon to sustain their road, the line through Virginia will have to rely upon; they both encounter the same rivalry. The intelligent and sagacious president of that company, while he is advocating his railroad with the experience of a quarter of a century before him, and states its advantages with the pen of a ready and elegant writer, never loses sight of water transportation as the means of beating down the formidable opposition of the long lines of railroads arrayed against him. If I had time to go back to the former reports of the Baltimore and Ohio railroad company, I could draw from them the strongest arguments, set forth by the distinguished presidents of that company, who have always adopted the policy of keeping their road within its proper sphere, that could anywhere be found in favor of water carriage over railway transportation. But with the short period remaining to me when this report must be laid before you, and the heavy pressure of business consequent upon the near approach of the annual meeting of the stockholders, I am compelled to confine myself to a few extracts from the 25th annual report now before me. In this report the president bears the most unequivocal testimony to the superiority of water over railway transportation. Referring to the Ohio river, he says: "The board see no reason to believe that the river navigation will ever lose its importance, whether for passengers or freight, in any view which may be presented of the nature and facilities of railroad transportation. In cheapness of transportation, the navigation of the Western rivers may be said to be without a parallel, and to defy any competition which modern science and ingenuity will be likely to suggest. From Pittsburg to New Orleans, a distance of two thousand and fifty miles, the present charge for a cabin passage, inclusive of board and living, does not exceed fifteen dollars, while for the same distance by railroad, at the usual rates, it would range from sixty to eighty dollars, exclusive of board and extras incident to this mode of conveyance. It is a fact also worthy of note, that the article of flour can be transported from Pittsburg to New Orleans at a cost little exceeding fifty cents per barrel. For the same distance by railroad, the charge at the average rate would be six dollars per barrel; and in like proportion, as we reduce the rate to a standard which may be found to yield a remunerating return, after deducting the expense properly chargeable to the accounts of transportation, varying as they must do on different roads." With the view of shortening this report, already extended further than I anticipated when I commenced, I am compelled to omit a very interesting paragraph, shewing conclusively, that for "a journey of six hundred or a thousand miles, *cheapness and comfort*, with a large majority of the traveling



The discussion of this subject would extend this report to an almost interminable length, and transcend the limits prescribed to myself in the outset, of a summary statement of facts.

I have said thus much with the view of inviting others to the consideration of the subject, and under the imperious sense of the obligation imposed upon me in the legitimate discharge of my duty, to warn the state against embarking in an improvement upon estimates which I know to be erroneous—an improvement which will have the effect seriously to embarrass her finances and postpone the completion of the water line which I believe to be so essential to the prosperity of the state, and which I am confident will be carried through to the Ohio river. If not before—as I hope and trust it will be—it will follow on as the result of the severe ordeal of the failure of the railroad, as the last hope of recovering from its sad and ruinous effects.

I am, gentlemen,

Very respectfully,

Your ob't serv't,

WALTER GWYNN,  
Chief Engineer J. R. & K. Co.

*Richmond, November 18th, 1851.*

public, are more important than *time*, and the traveler who consults pleasure and convenience, will avoid, at almost any sacrifice, the monotony and fatigue of successive days and nights of railroad travel." These facts, derived from the large experience of the president, are set forth with the view of shewing that "*cheapness and comfort*" of the river line in connection with the Baltimore and Ohio railroad, will ensure to it the through travel. The same medium of cheap transportation is relied upon to secure the trade. For "In connection," says the president, "with the already reduced rates on the Ohio river, this road may be expected to offer inducements not only to our own city," (Baltimore,) "but to Philadelphia, New York and Boston, which cannot fail to attract a large proportion of merchandize destined for remote situations in the West, which has heretofore sought other and more expensive channels of communication."

"The through charge upon general tonnage by the New York and Erie road, between New York and Cincinnati, has been lately announced at an extreme limit of \$1 60 per hundred pounds. The highest rate between New York and Baltimore will not exceed fifteen cents. If to this we add a charge of say fifty cents over the Baltimore and Ohio railroad (which experience has shewn to be remunerative) to Wheeling, and from thence to Cincinnati by river, say ten cents, we shall have a total of seventy-five cents between New York and Cincinnati, or more than fifty per cent. below the reduced rates upon the Erie road, the charge on the Baltimore and Ohio railroad being more in proportion to length and the profit greater than on the Erie road at the rate above indicated."

The above shews the ratio between the rates of transportation on the Ohio river and the Baltimore and Ohio railroad to be as *one* to *five*. With a continuous water line to Richmond and the advantage of 70 miles in distance over the route to Baltimore by Wheeling, on which there are 379 miles of railroad, it would not be difficult to shew that produce could be carried cheaper from Point Pleasant by Richmond to Baltimore, if it must go there, than by Wheeling to Baltimore.

[ B.]

LEWISBURG, Sept. 22, 1851.

*To the President and Directors  
of the James River and Kanawha Co.*

GENTLEMEN,

In presenting to you a condensed view of the operations on the western improvements since my last annual report, the extraordinary repairs, ordinary repairs and financial condition will claim attention in their order.

The sum of one thousand seven hundred and sixty-four dollars and thirteen cents (\$1,764 13,) balance due on Gauley bridge, has been paid the last year, shewing the total cost of that work to be eight thousand four hundred and forty-eight dollars and thirty-four cents. (\$8,448 34.) If a due allowance be made for the cost of the parapet walls protecting the approaches to the bridge at either end—for the cost of painting and the extra finish at the ends, none of which were embraced in the original estimate, it will be found that the sum expended has very little exceeded the original estimate of that work.

The new arched bridge over the middle crossing of Dunlap's creek in the county of Alleghany has been completed and in use since the 1st of December last.

It is a beautiful structure, measuring on the comb one hundred and sixty-two feet, having a single cart way, and built after the same model as Gauley and Coal bridges, and handsomely finished with the exception of painting. The total cost of this bridge is one thousand three hundred and twenty-five dollars sixty-nine cents (\$1,325 69.)

The bridge over Howard's creek, which is an arched bridge also, but of a different description, has been roofed and weather boarded during the past year. The sum of two hundred and twenty-five dollars thirty-four cents has been paid on account of this bridge the present year, making the total cost of this structure five hundred and fifty-five dollars and forty-nine cents (\$555 49.)

Repairs were made necessary on the upper bridge over Dunlap's creek by the warping of the timbers, which have cost fifty dollars and two cents.

A small bridge, eighteen feet long, and costing eighteen dollars, has been built over Staton's branch, Kanawha county.

The sum of forty-five dollars has been paid out on account of shingles for roofing the upper bridge over Mud river.

A new trestle bridge, one hundred feet long, and costing two hundred and twenty-five dollars, has been built over Russel's creek in the county of Cabell.

The above constitute the several extraordinary works called for on this improvement during the last fiscal year, and have required a disbursement, in the aggregate, of three thousand five hundred and fifty-three dollars and eighteen cents (\$3,553 18.)

But for the singularly favorable winter, which left the road in much better than the usual condition in the spring, the *apparent* cost of repairs for the season would have been unusually large. Owing to the interruption, by cholera, of the work at the proper time last season, a considerable disbursement for road repairs made late last fall, are included in the ordinary expenses of the present fiscal year, increasing them much beyond the actual cost of the work executed this season.

The weather proved unusually favorable for operations on the road till the 1st of July, at which time the hands were generally discharged, leaving the road in excellent repair.

In the early part of July, twenty odd miles of road next east of Gauley bridge, were visited by excessive rains, causing a number of earth slips, and so seriously washing that portion of road as to render additional work absolutely necessary. In the execution of this work a considerable additional outlay had to be met.

The month of August was distinguished by heavy and frequent rains, extending from one terminus of the road to the other. These rains have greatly impaired the appearance as well as comfort of the road, besides making it necessary to apply considerable repairs at different points—work which is now in progress.

There has been paid out for ordinary repairs, including the work last fall, after deducting for sales of cattle, three thousand five hundred and ninety-five dollars seventy-six cents, or seventeen dollars and twenty-eight cents per mile.

About the middle of July the usual force was organized for work on the Kanawha river. The first work in view was setting the buoys, many of which had been displaced or destroyed during the winter.

Until a suitable stage of water might occur for this work, the hands were engaged in repairing the walls and wing dams at Elk shoals. Since setting the buoys, which was completed at the earliest practicable period, the force has been employed at Two Mile, Tyler and Johnson shoals, and in removing from different points reefs of sand and gravel deposited by sudden rises in the small tributary streams.

Some work now remains to be done at Johnson and Redhouse shoals, and at Baber's dam, which will probably be completed by the middle of October.

The disbursements for the Kanawha river during the last fiscal year, including damages to boats, law expenses and repairs, amount to two thousand five hundred and forty-eight dollars and thirty-six cents (\$2,548 36.)

As the fiscal year just ended comprises only eleven months, a just comparison between the collections and those of the previous year cannot be made.

During eleven months there has been collected from the Kanawha road seven thousand three hundred and fifty-seven dollars five cents (\$7,357 05,) about one thousand dollars less than was collected in the previous twelve months.

The tolls accruing on the Kanawha river during the same time amount to twelve thousand four hundred and eighty-one dollars thirty-three cents, only two hundred and eighty-two dollars fifty cents less than the tolls accruing the preceding twelve months.

The collections from the same source during the last fiscal year, amount to nine thousand seven hundred and fourteen dollars eighty-five cents, only eight hundred and twenty-eight dollars seventy-two cents less than those of the preceding year.

The amount of delinquent tolls has been increased the last year, owing in part to the pecuniary pressure that has prevailed, but mainly to the discontinuance of the Salt association that had existed in Kanawha, and the formation of a joint stock company involving heavy individual subscriptions.

Arrangements, however, have now been effected, by means of which a gradual but certain reduction of the delinquent list will be made till all that is available will disappear from the collector's abstract.

Respectfully,

Your ob't servant,

**E. WALKER.**

At a meeting of the president and directors of the James river and Kanawha company, held on

WEDNESDAY, February 5th, 1851.

*Resolved*, That the chief engineer report to the board a plan for the repairs of the breach of Judith dam.

That he state the effect on the work of repairing with a battre, as suggested in the communication of Col. W. Turnbull to the committee of stockholders, referred to the board of directors; and that he also report whether an equal increase of strength and security can be given to the dam by substituting courses of additional masonry on the back, instead of a battre on the front of the dam, or otherwise.

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FRIDAY, February 7th, 1851.

In view of the importance of a speedy decision by competent authority of the questions involved in the resolutions of the stockholders, referring the subject of the repairs of Judith dam, with the report of their committee to the board of directors, and of its importance, and the executive committee deeming the presence of the board necessary:

*Resolved*, That the members of the board of directors be summoned to meet on Tuesday the 15th instant, at 6 o'clock, P. M., to take the same into consideration. At which meeting the chief engineer is directed to report in reply to the resolutions of the executive committee of the 5th inst.

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THURSDAY, February 20th, 1851.

A report of the chief engineer, on the subject of the repair of the breach at Judith dam, made in compliance with the resolution of the executive committee of the 5th inst. was submitted and considered.

On the weight of authority and the reasoning on the subject, there does not appear to be any sufficient ground to suppose that the breach was the result of any defect in the plan of the dam, as to its presenting adequate resistance to the pressure to which the structure was liable to be exposed. The board of directors, in approving the report of the chief engineer now presented, will not withhold the expression of the cordial approval of his suggestion, that precautions should be taken to give additional strength, notwithstanding their belief that the original plan was sufficient, and that it is the expectation of the board that to this end such modifications shall be from time to time proposed to the board, as the chief engineer may find conducive to the object

in the progress of the work of repair. Promptness and energy in making the repair are desirable, but security must not be disregarded.

*Resolved*, That the chief engineer take measures for the repair of the dam on the plan suggested in his report of the 18th inst., taking care, if the work is to be let, to contract to reserve full authority on the part of the company to change the same, if it shall be deemed advisable to do so in the progress of the work.

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FRIDAY, February 21st, 1851.

A report was received from the chief engineer in relation to the plan of operations for the repairs of Judith dam; and upon consideration, the same was approved.

1. The board are entirely satisfied that the best interest of the company will be promoted by doing the work of repair on company account.

2. The chief engineer is authorized to proceed immediately to organize a force for the purpose of repairing the breach.

3. That the board approve the plan of operations, in selecting Mr. Adams, who is experienced in such structures, and the allowance at the rate of \$125 per month is approved, as well from the qualifications required in the duty as from the necessity of urging the prosecution of the work by night as well as by day; and

4. The assignment of an assistant engineer to the special duty of superintending the work.

Extract from the records.

WM. P. MUNFORD, *Sec'y*.

RICHMOND, February 5th, 1851.

SIR,

In compliance with the resolution of the executive committee of this date, calling on "the chief engineer to report to the board a plan for the repairs of the breach of Judith dam; that he state the effect on the work of repairing with a battre, as suggested in the communication of Col. Wm. Turnbull to the committee of stockholders referred to the board of directors; and that he also report whether an equal increase of strength and security can be given to the dam by substituting courses of additional masonry on the back, instead of a battre on the front of the dam or otherwise:"

I beg leave to report—

1st. That the plan and specifications upon which the dam was originally built calls for dimensions quite ample, and for a class of masonry entirely sufficient for the repairs of the breach. But in order to facilitate the completion of the work, and to this end to enable it to be carried on by night as well as by day, with more despatch and certainty of faithful execution, and with the view also of keeping it in a condition to be less liable to serious accidents from sudden and unexpected rises in the river, I would recommend the following specification for the masonry:

*Specifications for the repairs of the breach in Judith dam.*

The lower course of face stone shall be 20 inches wide, and the second course shall be 32 inches wide, and shall break joints at least one foot on the stone back of the face stone. In the second course there shall be a header of 2 feet in length on the wall, extending back into the wall five feet, one in every ten feet length of the wall; the length of the stretchers shall not be less than 4 feet on the face of the wall. The joints shall be close for a distance of 18 inches measured back from the face of the wall.

The face of the wall on the front or down stream side of the dam, will be made of such alternate courses as those above described, to the coping.

The rear face of the wall to be made to conform to the original specification, the headers to be placed opposite the headers in the front of the dam,

The interior stone shall be laid in courses corresponding to the front and rear; they are to be split out to regular forms and dimensions, and shall in all respects be equal in quality and shape to the front stones before they are dressed; no stone to have less than 12 feet area of bed, laid closely and compactly together, so as to form good bond and substantial work, and tie the wall from front to back.

The interior stones, where they rest on the beds of the front or rear stones, shall be hammer-dressed, so as to make a joint not exceeding half an inch.



All the stones to be laid in full beds of mortar, and the joints to be filled with concrete, where practicable; when so close as not to admit concrete, with mortar or grout as may be directed.

2d. "The effect of repairing the breach with a batter as recommended by Col. Turnbull," would be to involve the company in an expense of about \$15,000 over and above what it would cost on the plan above proposed. For it would not be advisable to build up the breach with a batter, and leave the remaining portions of the dam vertical. If the batter is introduced it would involve the necessity of taking out the front stones of the whole dam, down to the foundation. And in order not to reduce too much the thickness of the wall at the top of the finished portion, and to avoid disturbance to the masonry of the interior of the dam in carrying back the batter, it will be necessary to increase the thickness of the base of the dam in front by the number of inches or feet, which the ratio of the batter applied to the height of the dam would give.

While a batter of one inch to the foot would have increased the resistance of the dam in its original construction about one-tenth, I think, owing to the disturbance of the old masonry which the introduction of the batter would render necessary, and the imperfection which then would be despite of all precautions in the bond between the new and the old masonry, that it would in the present case weaken the dam.

3d. In reply to the last enquiry embraced in the resolution, I beg leave to say that the same strength and security can be given to the dam by increasing its thickness, as would be imparted to it by the batter, and the thickness can be increased without adding any more cost than would be indicated by the additional masonry.

Yours, very respectfully,

WALTER GWYNN,  
*Chief Engineer J. R. & K. Co.*

JOHN Y. MASON, ESQ.  
*President J. R. & K. Com.*

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RICHMOND, February 18th, 1851.

SIR,

In compliance with the resolution of the executive committee of the 5th instant, calling on "the chief engineer to report to the board a plan for the repairs of the breach in Judith dam: that he state the effect on the work of repairing with a batter, as suggested in the communication of Col. Wm. Turnbull to the committee of stockholders, referred to the board of directors; and that he also report



whether an equal increase of strength and security can be given to the dam by substituting courses of additional masonry on the back, instead of a batter on the front of the dam, or otherwise :"

I beg leave to report—

1st. That the plan upon which Judith dam was built calls for dimensions quite ample, and for a class of masonry entirely sufficient for the repairs of the breach.

The plan of a dam is not a matter of opinion. There is no subject in civil engineering susceptible of more rigorous investigation and closer mathematical demonstration than the pressure of earth and water, and the strength of walls and embankments capable of resisting that pressure. Both subjects have been fully discussed by the ablest mathematicians and engineers of Europe and America. We have the experience of centuries to test the truth of the mathematical principles applied to the stability of revetments, and in no instance which has come under my observation, or within the scope of my reading, has geometrical theory and reasoning failed to harmonize with the results of experience. In the writings of Delaister and Poncelet, and in other French works, will be found comparative tables of the thicknesses of revetments, sustaining high embankments, deduced from the profile of Vauban, from the theory of Coulomb, and the rules and formulas of Belidor, Prony, and a host of other distinguished mathematicians and engineers, all agreeing with experience.

In fact, so unerring have the principles of natural philosophy proved to be, when submitted to practical tests, such has been the invariable and uniform coincidence of science and experience, that it would be difficult to name any subject which affords a more striking example of the truth of mathematics, and agreement between theory and practice.

In planning Judith dam, I had this large field of science verified by experience spread out before me. The scene was not a new one to me. It was one endeared to me by the studies of my youth. The names of the first laborers in this field, and of others who enlarged it and contributed to extend its usefulness, were as familiar to me as household words. What else could I do but follow in their footsteps? I did so, and I have no occasion to regret the path I took. But inasmuch as the plan of Judith dam has undergone much public discussion, accompanied with reflections that it might not be proper wholly to disregard, I have corresponded and conversed in relation to the plan with some of the most scientific and practical men in the country, and from all I have received but one response. "The plan of the dam is sufficient. No power of water can turn it over," has been the invariable reply.

From the numerous communications before me, I beg leave to submit that of Benjamin S. Ewell, Esq., professor of mathematics in William and Mary college, and a gentleman of professional experience in civil engineering. The mode in which Mr. Ewell treats the subject is worthy of the high reputation he has attained, both as a scholar and a mathematician. Mr. Ewell fully sustains the position assumed by me in the discussion of this subject before the stockholders, when I stated, in reply to the alleged imperfection of the cement as a cause of the

disaster to the dam, that had it been filled with a substance having no adhesion, or if no cement at all had been used, the weight of the stone would have been sufficient to prevent its overthrow. Mr. Ewell says, and the expression is remarkable for its coincidence with my own, "I do not hesitate to say, and it is demonstrable, that had the dam been filled with quicksilver the wall would not have turned over." He then proceeds with a demonstration, which fully sustains his premises. I would also beg leave to refer to E. H. Gill, Esq., principal assistant engineer tidewater connection, who has favored me with the results of an interesting investigation of the plan of the dam, in which he arrives at the conclusion, sustained chiefly by American authorities, "that its dimensions and proportions are fully adequate to resist any pressure to which it could be subjected, and that the cause of the breach should not be attributed to a want of thickness in the wall."

Mr. Michael Towers, the contractor who built Big Island dam—a contractor who has more experience in the construction of dams than any one of my acquaintance in the country, who is now engaged in building a dam on the Schuylkill, 32½ feet high, on a plan proposed by himself, who saw Judith dam in every stage of its construction, and after having examined the breach, says, "The plan I believe to be all sufficient." He also accounts for the breach in the same manner as described by me in my report of the 21st of December last.

Col. J. J. Albert, chief of the United States corps of topographical engineers, and Col. Wm. Turnbull of the same corps, also sustain the plan. Mr. John B. Jarvis, civil engineer of New York, whose experience and reputation are second to none in the country, fully concurs in the opinion.

With the truth of mathematics on my side, with experience to sustain me, and a weight of authority that would remove all doubt, if any ever existed on my mind of the efficiency of the plan of the dam; and above all this, encouraged by the offer of my friends in the vicinity of the dam, to sustain me in a guarantee of \$30,000, for the stability and durability of the dam, built upon the original plan—with all this weight of evidence, and, what I prize more than anything else, the spontaneous offer of my friends to sustain me, I would nevertheless, (if left to myself, and simply directed to repair the breach) under the influence of the common dictates of human nature, laboring under the inflictions which always visit misfortunes, however untoward the circumstances which bring them about, give greater weight and force to the principles which heretofore governed me, or like an experienced general under any circumstances of discomfort, I would strengthen my position.

What I would do if left to my own free will, I shall recommend to the board, regardless of any motive of distrust of my own judgment which may be ascribed to me.

The modification which I propose is confined to the specification of the manner of executing the masonry. It will give the work greater strength by increasing the ratio of the friction to the pressure, and the resistance arising from the adherence or cohesion of the cementing mortar. I am also influenced in the change I propose, by the facility

it will afford in the execution of the work, by enabling it to be carried on by night as well as by day, with more despatch and certainty of faithful execution; and with the view also of keeping it in a condition to be less liable to serious accidents from sudden and unexpected rises in the river. For these reasons, and in accordance with these views, I would recommend the following specification for the masonry:

The lower course of face stone shall be 20 inches wide on the top, and the second course shall be 32 inches wide, and shall break joints at least one foot on the stone back of the face stone. In the second course there shall be a header of two feet in length on the wall, extending back into the wall five feet, one in every ten feet length of the wall; the length of the stretchers shall not be less than four feet on the face of the wall. The joints shall be close for a distance of 18 inches measured back from the face of the wall. The face of the wall on the front or down stream side of the dam, will be made of such alternate courses as those above described to the coping.

The rear face of the wall to be made to conform to the original specification; the headers to be placed opposite the headers in the front of the dam.

The interior stone shall be laid in courses corresponding to the front and rear; they are to be split out to regular forms and dimensions, and shall in all respects be equal in quality and shape to the front stones before they are dressed. No stone to have less than 12 feet area of bed, laid closely and compactly together, so as to form good bond and substantial work, and tie the wall from front to back.

The interior stones, where they rest on the beds of the front or rear stones, shall be hammer-dressed so as to make a joint not exceeding half an inch.

All the stones in the dam to be laid in full beds of mortar, and the joints to be filled with concrete where practicable; when so close as not to admit concrete, with mortar or grout as may be directed.

2nd. "The effect of repairing the breach with a batter as recommended by Col. Turnbull," would be to involve the company in an expense of about \$15,000 over and above what it would cost on the plan above proposed. For it would not be advisable to build up the breach with a batter, and leave the remaining portion of the dam vertical. The effect would be to make weak joints in the wall at the angles where the battered wall would join the vertical portion of the wall now standing. So that if a batter be introduced, it will involve the necessity of taking out the front stones of the whole dam down to the foundation; and in order not to reduce too much the top thickness of the walls now standing, and to avoid disturbing the masonry of the interior of the dam as little as possible in carrying back the batter, it will be necessary to increase the thickness of the base of the dam in front by the number of inches or feet which the ratio of the batter applied to the height would give. Although the disturbance of the old wall on the plan of increasing the thickness of the dam at bottom by the base of the batter would be reduced to a minimum, still it will be very great; and owing to the imperfections which there would be despite of all precautions in the bond between the new and the old masonry.

sonry, the introduction of the batter which makes this disturbance necessary would weaken instead of adding strength to the dam.

In planning the dam, the advantages and disadvantages of a batter were weighed in my own mind. The plan of the Essex dam at Lawrence in Massachusetts, which was before me, has a batter of one inch to the foot. Such a batter, with a given base, would give no strength to the wall, but only guard against its "summering" or overhanging. And then it involves the necessity and all the objections to projecting the coping stones, so as to throw the water off from the face of the wall. And the hazard in the event of a coping stone being broken in a fresh, during which such a thing could only happen, of serious injury to the dam by the rush of water along down its face. And then if a greater batter is given to the front of the wall than will allow of a projection being given to the coping, so far as to prevent the water from falling on the wall, its face would have to be cut smooth, and the front stones cramped so that the water would glide smoothly down the slope, and not disturb the stones in its descent. This, in the case of a solid rock foundation, such as that at Judith dam, would have involved an expenditure altogether unnecessary. For these reasons, I did not give a batter to the lower face of the dam, but made it vertical.

3d. In reply to the last enquiry embraced in the resolution, I beg leave to say, that by reducing the number of the offsets in the back of the dam, making one for every two courses instead of for every course, an additional quantity of masonry may be added. This will give the dam greater strength and security than can be attained by any batter that can now be given to it, without incurring a very heavy expenditure—one greatly disproportionate to the advantages that would be gained.

Yours, very respectfully,

WALTER GWYNN,  
*Chief Engineer J. R. & K. Co.*

JOHN Y. MASON, Esq.  
*Pres't J. R. & K. Company.*

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RICHMOND, February 21, 1851.

SIR,

Touching the proposal of Mr. John B. Ives, this day referred to me, with directions to report my opinion "whether it is better for the interests of the company to contract for the work of repairs, or to have it done on company account; and if the latter course be preferred, what plan of operation I will recommend to secure a speedy and satisfactory completion of the repairs:"

I beg leave to report, that in my opinion the repairs of the breach would cost less, and it would be completed in less time, and the work

would be better executed, on company account than by contract. If it be the pleasure of the board to have the work executed on company account, I would recommend the immediate organization of a competent force of masons, stone cutters, quarrymen and laborers, to be operated under the superintendence of Mr. J. L. Adams, and an assistant engineer—that both these officers reside at the dam—that it be pressed night and day, and uninterruptedly prosecuted by all the energies of the company to its final and speedy completion.

That the salary of Mr. Adams be at the rate of \$1,500 per annum, and that of the assistant engineer at the rate of \$1,200; that Mr. Adams have charge of the mechanical work, and the assistant engineer, with the approval of the chief engineer, subject to the final approval of the board, be authorized to enter into contracts, from time to time, for all materials, provisions and tools, and all things else that may be necessary to carry on the work.

Yours, very respectfully,

WALTER GWYNN,  
*Chief Engineer J. R. & K. Co.*

JOHN Y. MASON, Esq.  
*President J. R. & K. Co.*

*Report on a Geological Examination of a portion of the Line and contemplated Reservoirs of the James River and Kanawha Canal.*

To the Hon. J. Y. MASON, President J. R. & K. Co.

SIR,

I ask leave to present a report on the result of a geological examination of a part of the line and of the ground to be occupied by the contemplated reservoirs of the James river and Kanawha canal, which I had the honor of being commissioned to make.

On reaching the Sweet springs, I placed myself, as you directed, under the guidance of Ed. Lorraine, Esq., the engineer in charge of the surveying party at that place; and to his accurate knowledge of the localities to be examined, as well as to his untiring efforts to render me every necessary assistance required in my explorations, much of whatever value this report may have, is due.

I shall attempt no geological generalizations in this brief report, but confine myself strictly to the statement of the facts observed in relation to the mineral composition and geological structure of the rocks forming the basins to be occupied as reservoirs, and of the portions of the line of canal examined—these being, as I conceive, the only considerations bearing directly upon the problem to be solved. I shall also endeavor to indicate the points where the facts stated may be observed by any one, for the structure of the region examined is sufficiently simple when once worked out.

*Mineral Composition of the Rocks.*

The rocks of this region are, for the most part, composed of sandstone, chert, quartzose rocks, clay slate and limestone.

The sandstones, from being made up of purely silicious grains, pass into argillaceous rocks; in the latter case they are subject to disintegration from atmospheric agencies, but are often hard, compact, and in general much laminated.

Among the clay slates a black variety is quite conspicuous; it is much cut up by cleavage planes, the surfaces of which are often smooth and glossy, resembling anthracite, and containing enough of bituminous matter to burn, is frequently mistaken for coal. Where the surface is protected from rain it is often covered with a white efflorescence composed of copperas, alum, and sometimes gypsum, as may be seen at the remarkable locality 4 miles below Clifton Forge, on the right bank of the river.

Scarcely has any rock impressed itself more strikingly on the physical features of the Alleghany mountains than this; for while the harder and less destructible rocks are found capping the most elevated ridges, it is almost invariably found in the valleys and on the sides of



Indeed, the valleys are generally due to the comparatively soft and yielding nature of these slates—they are subject to disintegration, and in that state are easily excavated by running water. They pass into ordinary argillaceous rocks, as may be seen on the left bank of the valley of Anthony's creek, opposite Bell's; and the stiff subsoil of most of the valleys of this region is derived from the disintegration of this rock. The great excellence of many of the roads crossing the mountains is due to the fact that the road covering is composed of this black slate; for although soft, it is, when pulverized, so firm and even, that the road bed is kept almost dry; and hence where it is not allowed to stand, wheels make but slight impression upon the road covering.

The limestones are more or less impure, being often filled with siliceous and cherty veins and nodules; hence the rugged appearance presented by the weathered surface of the limestones of this region, as contrasted with that of the purer limestones.

Calcareous rocks are subject to solution in water containing carbonic acid; rain water, charged with this acid, and percolating through the fissures of these rocks, enlarges them, by the solution of the limestone, and thus caves are, for the most part, produced. Caves, in rocks not so soft as limestone, are acted upon, are of rare occurrence.

Chert is a name given to a hard silicious rock, often found interbedded with limestone, adding greatly to the difficulty and expense of excavating that rock. It is often found forming thick beds. From ordinary silicious rocks it may be distinguished by having the peculiar lustre of flint.

Quartz rock is distinguished from sandstone by being more homogeneous in composition and structure. It is composed of silicious matter, and occurs both compact and granular; the latter variety is often pulverulent, resembling sandstone. Very frequently this rock appears granular and even pulverulent on the surface, at the same time that it is exceedingly hard and compact below.

This brief description of the principal characteristics of the rocks under examination will be sufficient for my purpose. I therefore proceed to the consideration of their geological structure, beginning with that part of the line which passes through the crest of the Alleghenies.

Every one has observed the frequent and high inclination of the rocks among these mountains; this inclination or dip varies from horizontal to vertical. If the course of the upturned edges of these strata be observed with a compass, it will be found to vary but little from N. E. and S. W., which coincides with the general direction of the mountain ranges of the state.

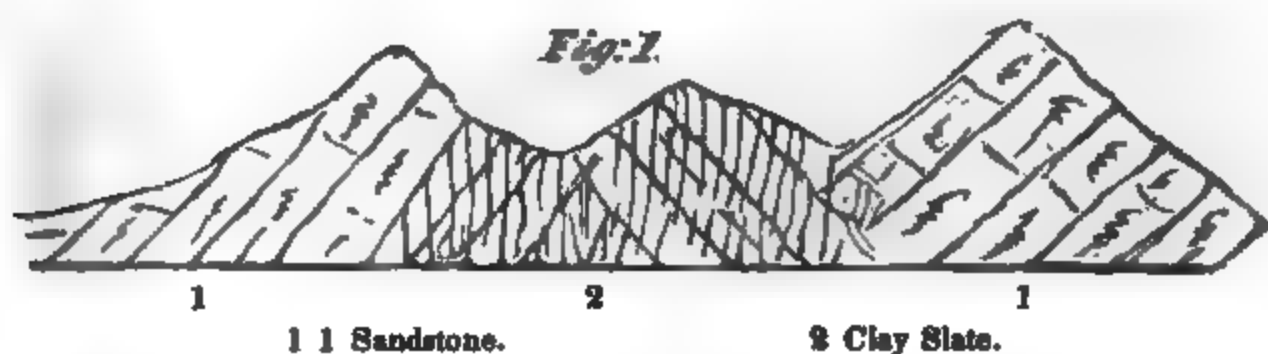
#### *Structure of the Alleghany Tunnel.*

The passage of the line through the mountain commences in a deep ravine, in the bed of Fork run, a tributary of Dunlap's creek, which rises at the water shed separating the Atlantic streams from those that flow into the Gulf of Mexico.

The rocks are well developed on the sides of the ravine, and beyond this they may be studied with ease along the public road, which runs generally parallel with the line. The course of the tunnel line is N. 62° W., and the strike of the rocks N. 25° E., so that the latter is nearly at right angles with the axis of the tunnel. Dip 40° S. E.

Commencing at the mouth of the tunnel, the first rocks consist of grey sandstones, fine grained, very hard and compact; although they occur in thick beds, in general their structure is slaty; a circumstance of some importance in connection with their excavation. These pass into thick bedded argillaceous rocks, which terminate in clay slates. On the public road these occupy the summit of the gap, from a point above the 11 mile post to one beyond Ellis's house. There are several folds or undulations in the strata in this distance. These slates are succeeded by sandstones identical with those at the commencement of the tunnel; they continue to Tuckahoe creek, along the bed of which they are finely exposed.

The following section, parallel with the line of the tunnel, will place the structure of the rocks in a clearer light than any description. There are, however, numerous flexures of the rocks, which it was thought unnecessary to introduce.



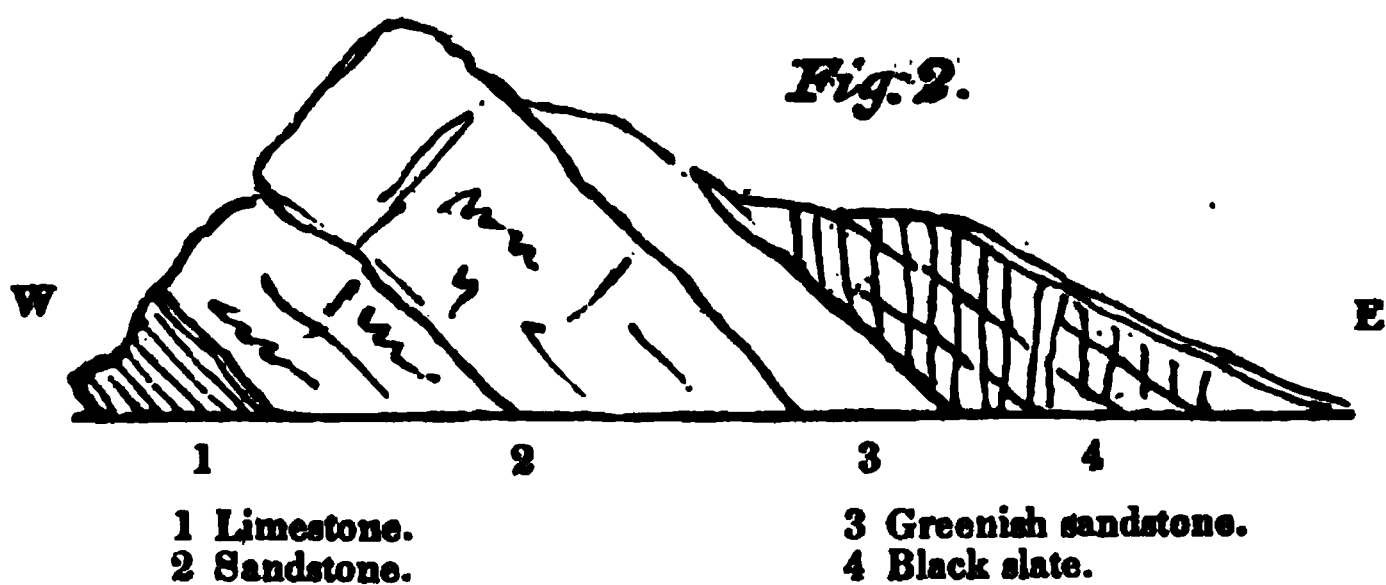
These strata of sandstone continue with slight alteration to station 228, where they are found overlying the black slates, which were thence traced to the White Sulphur.

*Feeder Line between Anthony's Creek Reservoir and the Summit Level.*

Two tunnels are contemplated on this line; one of only a few hundred feet in length, through the spur of the mountain, and the other along Whitman's branch of Anthony's creek. The former will pass through a hard white sandstone, which is quite compact below the surface. The upper part of this thick stratum passes into a rugged greenish sandstone, which lies immediately beneath the black slate throughout this region. This is evidently a continuation of the mountain bounding the valley of Anthony's creek on the west.



## Section on Tunnel.

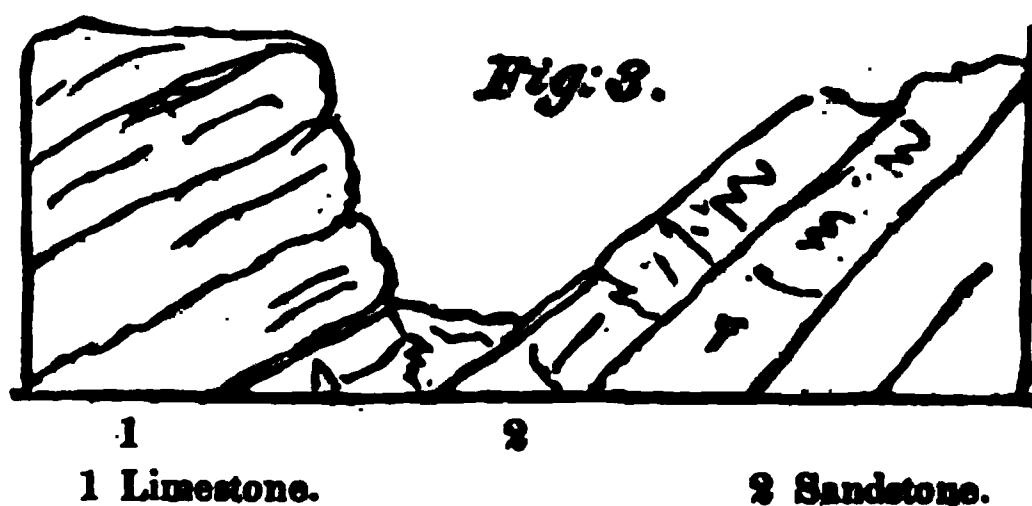


How far this section may suggest a change in the location of the line, I am unable to say.

The tunnel on Whitman's branch lies from one end to the other in the black slate. In speaking of the mineral composition of this slate, I mentioned that it was subject to disintegration; this result is due to the spontaneous decomposition of the *iron pyrites*, in which it abounds, producing the salts found efflorescing on the surface. It is for this reason that it is, even when quite compact and hard, utterly unfit for a building material.

I have examined this rock with some care, and have rarely found the disintegration extending much below the surface; this I apprehend is owing to its impervious character. Solid granite I have often seen perfectly disintegrated to a depth of 50 or 60 feet. I have also seen vertical escarpments of black slate in numerous localities in the valleys, which would prove that it wastes but slowly by disintegration, and I am disposed to consider it a far more reliable rock for tunnels than ordinary clay slate; and certainly its tendency to decay from changes of temperature and other atmospheric agencies must be greatly lessened, when only exposed in a tunnel. It is however intersected by joints and cleavage planes, which must affect its stability.

The bed of Dry creek forms a part of the feeder line between these two tunnels. It is composed of sandstone dipping towards the S. E. at an angle of  $25^{\circ}$ , and at a single point the left bank for a few yards is composed of limestone. The water in the creek did not extend as low down as this point, but Mr. Lorraine informs me that the stream finds here a subterranean passage. There was no means of examining the opening, as it was covered with masses of rock, but it cannot be great, as it is only at low stages of the creek that all the water disappears. Nevertheless the fact is interesting as a lesson of caution where limestone is concerned. *Fig. 3* will fully explain the conditions existing here.

*Section across Dry Creek.*

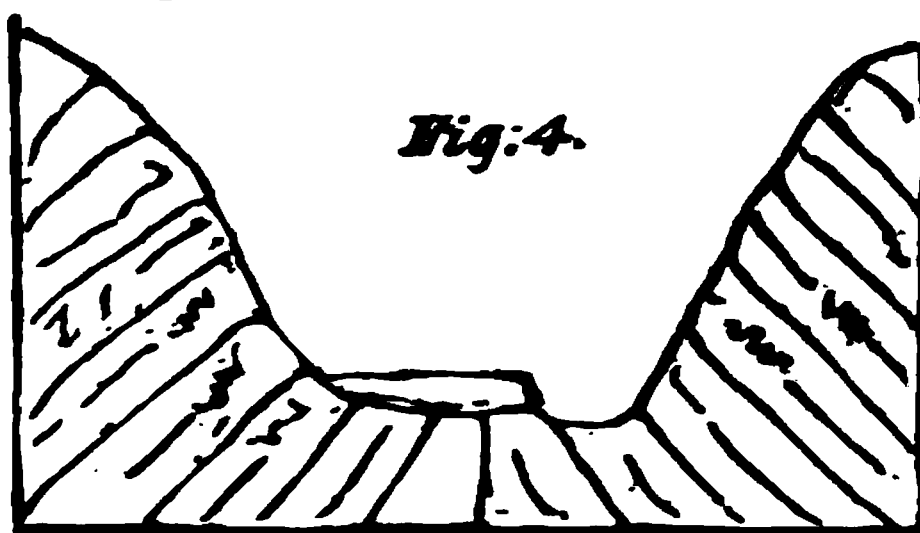
It will be seen at once that the dip of the limestone is most favorable to the escape of the water along its bedding planes. This spot of course presents no difficulty, as it is only 3 or 4 yards in length and can be easily avoided, the rest of the channel being composed altogether of sandstone.

As I walked up the bed of the creek, it was curious to observe how the water increased towards the source of the stream. At first the rocky bottom was dry, then there was water sufficient barely to moisten the surface, next it was found in pools, and a little higher it was running.

It is a prevailing opinion among the people here, that the water of these "dry creeks" escapes through fissures in the rocks; but the instance just noticed is the only one that came under my notice where I thought this possible. Very often the water sinks among the loose materials covering the bed of the creek, and reappears at a lower level; but where it disappears altogether it is due to the simple process of evaporation; nor should this be surprising, when it is recollected that a depth of 36 inches of water escapes annually by this means. Persons who have reflected but little on this subject are apt to consider the water taken up by absorption as an indefinite quantity, whereas it is entirely dependent upon evaporation. A surface once saturated with water can take up no more until an equal amount passes off by evaporation to make room for it.

*Geological Structure of the Reservoirs.*

The first reservoir examined was that on Tuckahoe creek. This occurs not far from the upper extremity of the tunnel, on the summit level, and is composed of the same sandstones exposed there. The stream flows along an anticlinal axis, and is bounded to the right and left by mountains. The bottom of the valley is covered to a considerable depth with soil, excepting where it is laid bare by the stream. In the bed of the creek some rocks are exposed that contain a little lime; it has, however, but slightly affected their solubility, as is indicated by the ledges of rock over which the stream flows, nor did I find any fissures on either side of the valley.

*Section shewing the structure of the Tuckahoe Reservoir.*

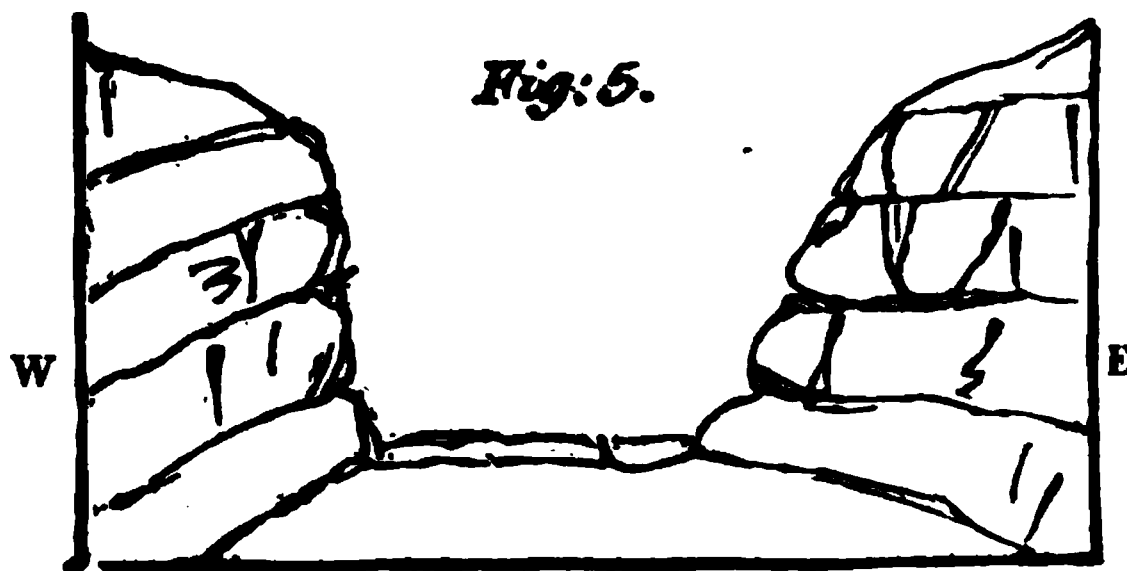
The reservoir in the valley of Howard's creek has its bottom covered with a thick deposit of stiff clay, the only rocks visible being black slate and chert. The black slates were traced in the creek, and on the left side of the valley, nearly throughout its entire extent.

*Jericho Reservoir.*

At the outlet of this reservoir a thick stratum of limestone is cut in two, and appears outcropping on the right and left up the sides of the gorge.

Towards the bottom it is hard and cherty but higher up it is much intersected by joints and fissures, and altogether presents a very doubtful aspect as the site of a dam. The limestone, however, extends but a few hundred yards up stream, where the black slate makes its appearance.

As the gorge continues narrow for some distance, your engineers may think proper to avoid this suspicious point by constructing the dam a little higher up stream. The rest of this interesting reservoir is composed of the usual black slate, as may be seen in the creek, in the middle of the valley; it was reached in Sneed's well, and at the upper end, where it was excavated in search of coal.

*Section across the gorge of Jericho Reservoir.**Anthony's Creek Reservoir.*

The great extent of this reservoir, and the importance consequently attached to it, made its examination an object of special interest.

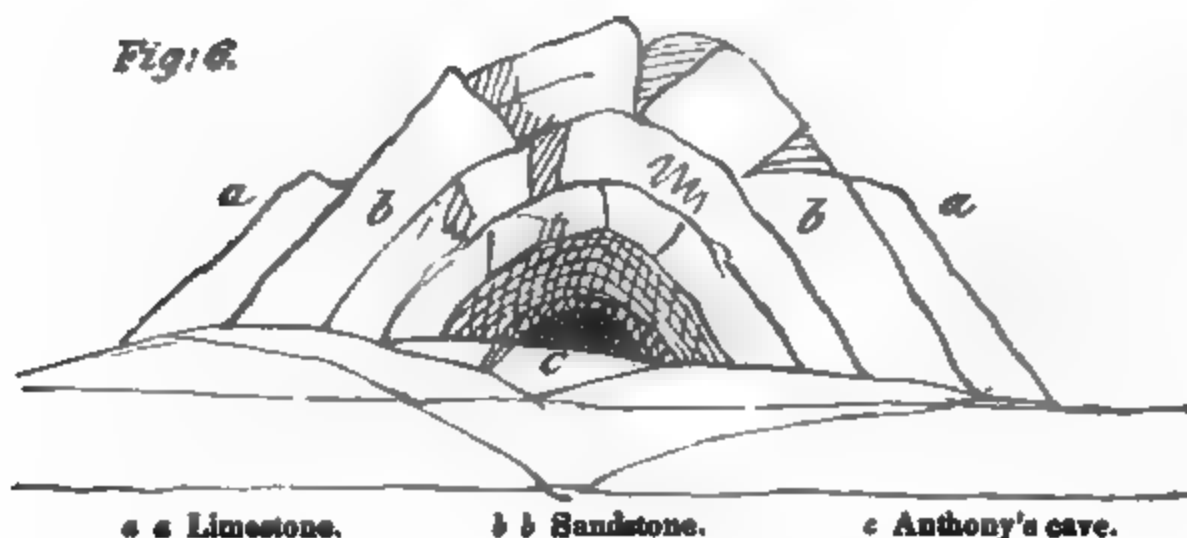
Like nearly all the streams of these valleys, Anthony's creek flows over a bed composed of black slate; the whole of the western slope of the mountain, and more than two-thirds of that on the eastern side of the valley is composed of this rock. Towards the southern extremity of the valley the creek encroaches upon the mountain, the slate is removed, and the underlying rocks, consisting of sandstone and limestone, are brought to view.

Before I had examined the valley, the mountain just mentioned, apparently composed of limestone for a distance of two miles from the site of the proposed dam, appeared a serious obstacle, particularly as it was known to contain caves and to be otherwise a good deal fractured.

After receiving Whitman's branch the creek turns abruptly to the west and finds a passage through a narrow gorge, and at this fine locality the structure of the mountain is fully displayed. On the right bank of the creek is a point called Anthony's cave, where the rocks have been pushed up into one of those magnificent folds so common among the Alleghanies.

An unbroken arch composed of a thick stratum of sandstone occurs here. Within this arch a part of the rock has fallen down, leaving the rest projecting, which forms what is called the cave. To ascertain how far this opening may be connected with a cave in the mountain we made a slight excavation in the floor; but instead of finding limestone, we found a stratum of slaty, argillaceous rock, containing but a trace of lime, so that it was obvious that no cave of any extent could exist here. To the right and left of this limestone was found reposing against the sandstone, as represented in Fig. 6

*Section in the Gorge at Anthony's Cave.*



a a Limestone.

b b Sandstone.

c Anthony's cave.

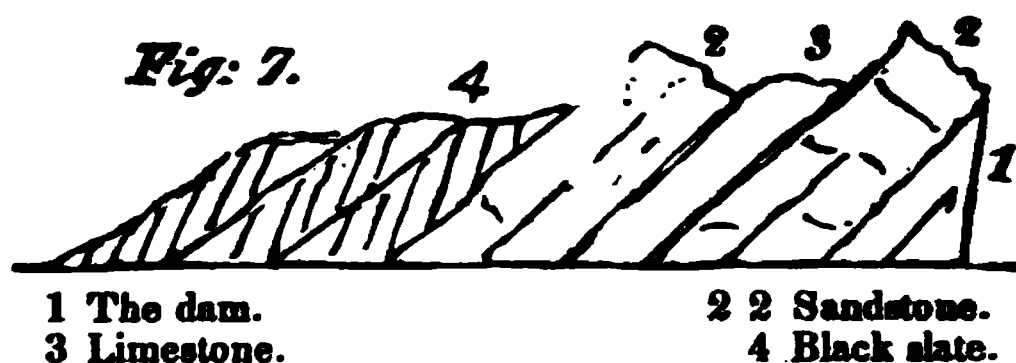
On the opposite side of the stream, the counterpart of this was seen, shewing that the mountain was once continuous, and also that we have here what the geologists call an *anticlinal axis* or a line towards which the rocks on both sides lean. The strike is N. 30° E. and the dip 40°.

An exploration here explained very clearly the structure of the mountain.

The examination was commenced at station 1, on the left side of the gorge; the sandstone was traced along the contour line of the water level of the reservoir to station 11, and as the site of the dam is placed 100 feet from the axis of the mountain, the sandstone strata have a thickness of 1,200 feet. The bed of limestone was found to be 400 feet in thickness. This is succeeded by another bed of sandstone, after which the black slate makes its appearance.

Supposing the contour line to be developed into a straight line, it would present at this place the following section.

*Section on left side of the Gorge.*

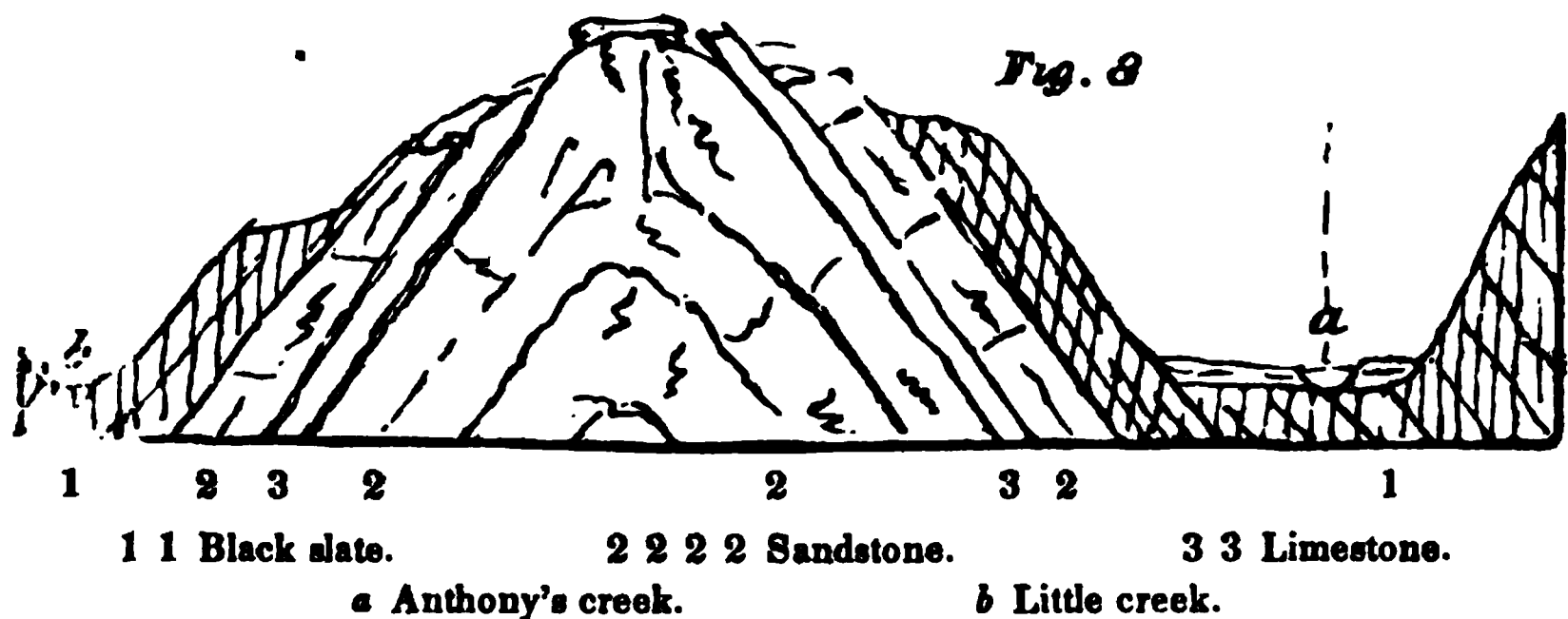


The slate was traced up Whitman's branch to its source. Some of the ravines on the east were examined to ascertain the thickness of the slate, and to assure ourselves that no other rock formed any part of the valley on that side.

It now remained to account for the apparent expansion of a stratum of limestone only 400 feet thick, into an exposure extending over a distance of two miles. The dam was again made the starting point, and the same rocks observed that had already been seen on the opposite side; but after emerging from the gorge the compass shewed that we were no longer crossing the strata at right angles, but going along the strike, measuring the length rather than the thickness. Pursuing the water line of the reservoir, we next found sandstone succeeded by the black slate which surrounds the rest of the valley.

The limestone has the same dip as the slope of the mountain, and some bold springs issuing from this rock shew, what was sufficiently evident from the dip, that the underground drainage, as well as that from the surface, is *towards* the valley. The limestone, in many places, extends to the very crest of the mountain, and to be certain, from absolute examination, that the sandstone occupies the centre of the ridge, we ascended the mountain and found thick ledges of this rock running parallel with the limestone.

The opposite side of the mountain on Little creek presents the same series of rocks, superimposed in precisely the same order. The section *Fig. 8*, will explain fully the structure of the valley of Anthony's creek.

*Section across the Valley of Anthony's Creek.*

This section, together with the map accompanying this report, will so fully explain the geological structure of this reservoir that further description seems superfluous.

To convert this valley into a magnificent lake, all that seems necessary is to reproduce the conditions that once existed, by connecting the opposite sides of the gorge by a dam 100 yards in length. That the water was thus once confined, we have abundant evidence in the horizontal deposit of sedimentary matter covering the bottom of the valley, which cannot be referred to the creek in its present state, nor to running water under any circumstance. It must have been deposited from water having little or no motion, which subsequently escaped through this gorge, which was produced by some of those disturbances that have left numerous monuments of their force among the Alleghanies.

After the facts thus briefly presented, it is unnecessary to say a word as to the adaptation of this valley to the purposes of a reservoir. It would, I conceive, be difficult to shew, had your engineers the choice of the rocks of this region, how they could make a better disposition of them.

*The Supply of Water for the Summit Level.*

There is scarcely any principle in science better established, than that relating to the uniformity of the quantity of water falling annually from the atmosphere upon a given space of the earth's surface. This quantity, taking a series of years, so constant in the same place, varies with the latitude, proximity to the ocean, prevailing winds, and elevation of the country. In the temperate region of the United States this quantity is equal to 37 inches in depth, and at the sites of your proposed reservoirs among the mountains, it is doubtless greater. A considerable portion of this is again returned to the atmosphere by evaporation; the rest either passes directly to the ocean along our rivers, or after percolating through the soil and rocks below the surface, affords a supply for springs, which unite and form streams. The difference between these two quantities, that is, between the total amount of rain, and the quantity evaporated, gives the supply of water available for economical purposes.

ough this subject has been but little considered amongst us, by many it is even viewed as a mere theoretical speculation having no practical value, nevertheless it has been fully investigated where, and the application of the results to practical purposes has not to be any longer considered problematical.

The annual evaporation from the surface of water is equal to the amount of rain that falls upon it, and under favorable circumstances may exceed that quantity; for instance, Mr. Dobson's experiments at Liverpool gave the mean annual quantity of rain 37.48 inches, and for evaporation 36.78 inches. But the evaporation from soil is nearly so great as this, and from the surface of rocks it is almost nothing. For the first experiments on this subject we are indebted to the illustrious Dalton, assisted by Mr. Hoyle. A square box was filled with soil, and exposed, side by side, with an ordinary rain gauge; the water that percolated through the soil was collected, and compared with the quantity indicated by the rain gauge. The mean quantity of rain for that year was 33.56 inches, and the amount evaporated from the surface of the soil 25.16 inches, leaving 8.40 inches, or one fourth of the whole, as the available supply.

It must be observed here, that the soil in the experiment was placed under the most favorable conditions for evaporation; the surface being horizontal, the water was readily absorbed and retained for evaporation—conditions that rarely exist where reservoirs are formed. Take, for instance the valley of Anthony's creek, where the sides of the bounding mountains are inclined, from top to bottom, at an angle varying between  $20^{\circ}$  and  $45^{\circ}$ , and are moreover covered with but a scanty soil and to a great extent with even naked rocks. It is evident that during rains the water must flow down with great rapidity into the valley, leaving but little time for absorption or evaporation.

Mr. Fairbairn, a distinguished European engineer, in his proposed improvement of the river Bann by reservoirs situated under conditions similar to those presented at Anthony's creek, estimates the available water at five sixths of the whole amount, and his estimates in this respect have generally been exceeded by the practical results.

Knowing the area and contents of a reservoir, and the area of its catchment basin, or area draining into it, the application of the simple principles just presented is sufficiently plain.

From a personal examination of the valley of the creek, I have not the slightest doubt of the fact that the quantity of water available will far exceed the calculations of your engineers. Nevertheless, as I know that the field work is completed for a minute and accurate survey of the reservoir and its catchment basin, I deem it not advisable, if even it were proper, to enter into any calculation in advance of the report of that survey. In a grave question like this the best possible evidence should be presented, and in this respect the results of the survey alluded to will leave little to be desired.

Besides the method of arriving at the available supply of water by calculation, there is another for which I respectfully and earnestly ask your attention; it is the gauging, for a year or as much longer as possible, the water of the creek. This was first suggested by Mr. Lor-



rairie, and is now in operation. The results obtained in this way present fewer objections, and address themselves to the apprehension of every mind. The water that flows down the creek is obviously the available water, after having been subjected to evaporation, absorption, percolation, and every other conceivable cause of loss, so that the only correction to be made is the difference between the evaporation from the surface of the reservoir and that from the land submerged, because as the creek is gauged before the reservoir is filled, it appears to give too much—but on the other hand the area submerged is greater than that of the water, and the bottom being horizontal is most favorable for evaporation, so that the two would nearly balance, and even this correction may be omitted, and the quantity flowing down the creek taken as the available supply.

No one, I suppose, will doubt that water passing down a stream may be collected in a reservoir. The quantity of available water once obtained, your engineers can shew that it is among the simplest applications of their science, to construct an embankment or dam across the gorge of the valley that shall retain the whole, or so much of this water as shall be required for the supply of the summit level with all its contingencies.

It is well known that many of the most important canals of the world have their summit levels supplied from reservoirs, and it would be easy to point out numerous instances where rain water thus collected has been applied to economical uses on a very large scale. I shall content myself with one—the Shaw's Water Works.

The inhabitants of Greenock were anxious to procure a supply of water for domestic use. Engineers were employed, who examined the scanty streams in the vicinity, and reported unfavorably. At length Mr. Thom examined the surrounding country, calculated the supply of rain water that could be economized, and astonished the good people of Greenock by shewing that "not only water sufficient for domestic and municipal purposes might be brought in, but that water power might be made available for mechanical purposes to a very great amount. His scheme has been carried into effect. His calculations have been more than borne out, and the rapid rise of Greenock as an emporium of commerce and industry is, in no small degree, due to the bold foresight of the engineer of the Shaw's Water Works."

Dr. Kane, the eminent chemist, who was himself investigating this question for Ireland, writes still further:

"Anxious to obtain information as to the actual condition and performance of these remarkable Water Works, and unable personally to visit Scotland, I have to thank one of the most eminent men that country has presented to the practical sciences, for a note descriptive of the power that is now produced by the water so economized. Mr. Scott Russell replied to my enquiries in the following words:



‘MY DEAR SIR,

‘I had hoped to have been able to get a full and very satisfactory account of the Shaw’s Water Works, drawn up for you by a competent engineer resident on the spot; but I find that so many delays are occurring to prevent this, that I now write to beg you will not calculate upon it; had my own time permitted I should have done so myself, but now, just when I might have hoped for leisure, I am taken from home.

‘I have, however, procured a copy of a *now* scarce pamphlet, printed some thirteen or fourteen years ago, *before* the works were finished, giving some account of them as *proposed*. I may now add for your information, that everything *predicted* has been satisfactorily and fully accomplished; that the company now divide a fair per centage on their capital, even though at present only one-half of the capabilities of the reservoir are employed. There has in all years been an abundant supply.

‘I may add, that the *sole supply of water is from the fall of rain*, and that the artificial lake has been created in a place where formerly there were only slender mountain rivulets.

‘The guaranteed and realized supply of water amounts to 2,500 cubic feet per minute per 310 days per annum. \* \* \*

‘J. SCOTT RUSSELL.’ ”

With best wishes for the success of the noble work in which you are engaged,

I am, Sir,

With much respect,

Your obd’t serv’t,

M. TUOMEY.

*Richmond, November 6th, 1851.*

[No. 3.]

Statement showing the Amount of Actual Tonnage, the Equivalent Tonnage for one Mile, the Equivalent Through Tonnage, the Annual Average Rate of Tolls per ton per mile, the Amount of Tolls on Tonnage and on Passengers, the Amount for Rent of Houses, Lots and Water Power, the Gross Receipts from Tolls, Rents and Scalehouse Fees, the Annual Expenses and Repairs of the Canal, (including damages by freshets,) with Salaries of Agents, and the Nett Revenue for the period stated.

From January 1, to Nov. 30, 1841, " Dec. 1, 1841, to Nov. 30, 1842, " Dec. 1, 1842, to Oct. 31, 1843, " Nov. 1, 1843, to Oct. 31, 1844, " Nov. 1, 1844, to Oct. 31, 1845, " Nov. 1, 1845, to Oct. 31, 1846, " Nov. 1, 1846, to Oct. 31, 1847, " Nov. 1, 1847, to Oct. 31, 1848, " Nov. 1, 1848, to Oct. 31, 1849, " Nov. 1, 1849, to Oct. 31, 1850, " Nov. 1, 1850, to Sep. 30, 1851,	Actual Tonnage conveyed on the Canal	Equivalent Tonnage for one mile.	Equivalent Thru' Tonnage.	Average rate of Toll per ton per mile.	Am't of Tolls on Tonnage.	Amount of Tolls on Passen- gers.	Amount of Rent for houses, lots and water power, and scalehouse fees.	Gross Receipts from Tolls, Rents and Scalehouse fees.	Expenses and Repairs of Ca- nal, (including damages by freshets,) salaries of Agents, &c.	Nett Revenue from the Canal.
	110,141.7	6,496,971.7	44,015.6	Cents. 1.917	\$ 116,332.93	5388.36	5584.98	121751.99	62140.96	59510.93
	112,707.5	5,902,007.2	39,740	1.782	103,430.94	5797.74	7896.93	114812.97	95439.02	19373.95
	113,742.6	6,253,896.1	42,869	2.62	163,595.87	4289.05	9630.06	175721.85	74706.99	101014.87
	122,695.2	6,009,719.4	41,162	2.899	173,569.29	4189.28	6565.25	187386.64	54337.56	133051.03
	134,759.3	7,108,163.4	48,686	2.589	181772.11	5313.69	7199.15	193251.05	65131.47	128519.59
	125,653	7,640,263	52,331	2.158	163930.58	7258.04	8155.54	178377.77	51889.29	128488.48
	146,442.4	8,588,821	58,928	2.27	194896.81	8708.79	5912.09	211761.14	71342.74	140418.40
	155,950.7	8,998,032	61,830	2.18	196628.69	6214.22	8193.45	208755.90	83191.14	125627.06
	175,210.2	10,319,149	70,680	2.21	237188.69	4347.44	9345.36	249729.78	74090.29	175639.49
	177,381.7	9,708,415	66,496	2.33	226547.53	3791.59	9689.51	239684.49	53715.47	155969.02
	174,614.3	9,983,968	68,383	2.10	203500.41	3943.65		222113.57	64146.78	157966.73

[No. 4.]

*Statement showing the Quantities of the Principal Articles Conveyed on the Canal of the James River and Kanawha Company, during the several periods specified.*

[illegible]

## [ No. 8.]

*Amount of Toll received upon the James River and Kanawha Canal on the following Articles, from the 1st of October 1848 to the 1st of October 1849.*

TITLE OF ARTICLE.	Amount.	TITLE OF ARTICLE.	Amount.
Agricultural implements, -	66 26	Furs and peltry, -	15 56
Agricultural products not otherwise designated, -	4 00	Ginseng, -	98 72
Anvils, -	20	Glass and glass ware, -	425 26
Apples and other dried fruit, -	21 53	Gravel, earth and sand, -	226 92
Apples and other green fruit, -	463 04	Grindstones, -	67 01
Bacon, -	1131 68	Groceries not otherwise designated, -	5 24
Bar iron, -	2031 77	Hardware, -	1 90
Barrels, casks and boxes, empty, -	346 19	Hats and caps, -	60 69
Beans, -	23 38	Hay and fodder, -	38 04
Beef, salt and fresh, -	3 61	Hides, -	463 34
Beer, -	5 17	Honey, -	73
Beeswax, -	120 94	Hops and herbs, -	41
Bellows, -	1 08	Lard, -	260 33
Books, -	2 65	Laths, -	1 59
Bran and other mill offal, -	58 25	Leather, -	891 57
Bricks, -	72 84	Lime, -	418 28
Buckwheat, -	36 33	Liquorice, -	80 07
Butter, -	615 77	Liquors, -	7341 54
Candles, -	363 58	Live stock, -	35 13
Caps, sills and timber, dressed, -	54 69	Machinery, -	224 72
Carpenters' work, -	28 70	Mackerel and fish of all kinds, -	1742 07
Carriages, -	185 64	Mahogany, -	47 98
Caststeel, -	76 46	Marble, dressed, -	96 06
Cheese, -	29 00	Marble, rough, -	13 38
China ware, -	45	Mechanics' tools, -	3 72
Cider, -	71 93	Merchandize not enumerated, -	8177 40
Cigars, -	1 75	Metals not otherwise designated, -	673 95
Coffee, -	10362 71	Mill stones, -	122 64
Coke and coal going up canal, -	1473 25	Mineral water, -	4 92
Confectionary, -	2 23	Molasses, -	2313 43
Copper scraps and old copper, -	11	Moss, -	3 66
Cordage, -	27 89	Nails and spikes, -	3031 21
Corn and corn meal, -	4034 26	Oats, -	237 60
Cotton, -	780 92	Oil, -	184 94
Cotton bagging, -	10	Oysters, -	5 36
Cotton waste and rags, -	64 23	Paper, -	14 50
Cotton yarns, -	268 18	Peas, -	18 40
Crackers, -	68	Pig iron, -	12349 91
Curled hair, -	20	Pork, salt and fresh, -	28 03
Drugs, -	1 87	Potatoes, -	159 53
Dye stuffs, -	42 53	Potters' and stone ware, -	87 39
Earthen and queensware, -	387 94	Powder, -	80 82
Eggs, -	11 96	Rice, -	3 06
Feathers, -	369 79	Rye, -	15 50
Flour, -	35248 26	Saddlery, -	4 29
Foreign fruits, -	5 29	Salt, -	10205 12
Furniture, -	490 80	Seed of all kinds, -	790 22

TITLE OF ARTICLE.	Amount.	TITLE OF ARTICLE.	Amount.
Shingles, - - -	38 25	Vegetables not otherwise desig-	
Shoes and boots, - - -	135 23	nated, - - -	3 17
Shot, shell and castings, - - -	3292 62	Venison, - - -	6 40
Slate, - - -	16 62	Vinegar, - - -	276 34
Soap, - - -	146 83	Wheat, - - -	26446 00
Spirits of turpentine, - - -	3 23	Wool, - - -	191 46
Staves, - - -	198 71		
Steam engines, - - -	21 06		212491 39
Stone, rough, - - -	930 35	Miscellaneous, - - -	26003 10
Sugar, - - -	10722 36		
Tallow, - - -	12 81		
Tobacco, - - -	59587 72	Total, - - -	238494 49

[ No. 9.]

Table shewing the Revenue of the James River and Kanawha Canal, from Tolls on the following articles, commencing with the 1st of October 1849, and ending with the 1st October 1850. Also the proportionate Revenue under the system proposed by the Committee of Revision; the difference in the amounts, and the present and proposed rates.

TITLE OF ARTICLE.	Am't rec'd from 1st Oct'r 1849 to 1st Oct'r 1850.		Am't by proposed reduction.		Difference.		Present rate.		Proposed rate.	
	Dolls.	Cts.	Dolls.	Cts.	Dolls.	Cts.	Cts.	m.	Cts.	m.
Agricultural implements, . . . . .	369	00	184	50	184	50	4	0	2	0
Agricultural products not otherwise designated, . . . . .	19	71	13	14	6	57	3	0	2	0
Apples and other dried fruit, . . . . .	-	-	-	-	-	-	3	0	1	5
Apples and other green fruit, . . . . .	85	01	28	33	56	68	3	0	1	0
Anvils, . . . . .	1	92	1	44		48	4	0	3	0
Bacon, . . . . .	1089	33	680	83	408	50	4	0	2	5
Bar iron, . . . . .	2212	16	1327	29	884	87	2	5	1	5
Barrels, casks and boxes (empty,) . . . . .	467	76	350	82	116	94	2	0	1	5
Beans, . . . . .	3	16	1	97	1	19	4	0	2	5
Beef, salt and fresh, . . . . .	3	05	1	90	1	15	4	0	2	5
Beer, . . . . .	50	03	37	52	12	51	4	0	3	0
Beeswax, . . . . .	143	65	53	86	89	79	4	0	1	5
Bellows, . . . . .		64		32		32	4	0	2	0
Blocks, . . . . .	15	86	11	89	3	97	4	0	3	0
Bran and other mill offal, . . . . .	61	87	30	93	30	94	2	0	1	0
Bricks, . . . . .	100	65	40	26	60	39	0	5	0	2
Buckwheat, . . . . .	22	34	11	17	11	17	2	0	1	0
Butter, . . . . .	684	80	342	40	342	40	4	0	2	0
Candles, . . . . .	674	25	421	40	252	85	4	0	2	5
Caps, sills and timber, dressed, . . . . .	-	-	-	-	-	-	2	0	1	0
Carpenters' work, . . . . .	25	16	12	58	12	58	4	0	2	0
Carriages, . . . . .	266	36	199	77	66	59	4	0	3	0
Cast-steel, . . . . .	67	19	50	39	16	80	4	0	3	0
Cheese, . . . . .	18	75	9	37	9	38	4	0	2	0
China ware, . . . . .	1	01		63		38	4	0	2	5
Cider, . . . . .	103	68	34	56	69	12	3	0	1	0
Cigars, . . . . .	5	42	3	38	2	04	4	0	2	5
Coffee, . . . . .	14307	58	8942	23	5365	35	4	0	2	5
Coal and coal going up the canal, . . . . .	2175	72	1305	43	870	29	0	5	0	3
Confectionary, . . . . .	1	23		92		31	4	0	3	0
Copper scraps and old copper, . . . . .	12	13	7	58	4	55	4	0	2	5
Cordage, . . . . .	114	61	85	95	28	66	4	0	3	0
Corn and corn meal, . . . . .	1191	70	1191	70	-	-	2	0	2	0
Cotton, . . . . .	377	88	236	17	141	71	4	0	2	5
Cotton bagging, . . . . .	-	-	-	-	-	-	4	0	3	0
Cotton waste and rags, . . . . .	60	59	30	29	30	30	2	0	1	0
Cotton yarns, . . . . .	195	46	146	59	48	87	4	0	3	0
Crackers, . . . . .	1	31		98		33	4	0	3	0
Curled hair, . . . . .		06		04		02	4	0	3	0
Drugs, . . . . .	3	97	2	97	1	00	4	0	3	0
Dye stuffs, . . . . .	76	69	57	51	19	18	4	0	3	0
Earthen ware and queensware, . . . . .	880	55	550	34	330	21	4	0	2	5
Eggs, . . . . .	4	05	2	02	2	03	4	0	2	0
Leathers, . . . . .	341	05	255	78	85	27	4	0	3	0
Flour, . . . . .	34611	31	20766	78	13844	53	2	5	1	5
Foreign fruits, . . . . .	1	00		62		38	4	0	2	5

TITLE OF ARTICLE.	Am't rec'd from 1st Oct'r 1849, to 1st Oct'r 1850.		Am't by proposed reduction.		Difference.		Present rate.		Proposed rate.	
	Dolla.	Cts.	Dolla.	Cts.	Dolla.	Cts.	Cts.	m.	Cts.	m.
Furniture, . . . . .	641	26	400	78	240	48	4	0	2	5
Furs and peltry, . . . . .	25	80	19	35	6	45	4	0	3	0
Ginseng, . . . . .	76	24	47	65	28	59	4	0	2	5
Glass and glass ware, . . . . .	923	98	577	48	346	50	4	0	2	5
Gravel, earth and sand, . . . . .	301	71	Toll not to exceed for any dia.							
Grindstones, . . . . .	130	50	65	25	65	25	2	0	1	0
Groceries not otherwise designated, . . . . .	44		27		17		4	0	2	5
Hardware, . . . . .	8	43	5	26	3	17	4	0	2	5
Hats and caps, . . . . .	50	58	31	61	18	97	4	0	2	5
Hay and fodder, . . . . .	54	31	27	15	27	16	1	0	0	5
Hides, . . . . .	552	36	-		-		4	0		
Honey, . . . . .	25		15		10		4	0	2	5
Hops and herbs, . . . . .	-		-		-		4	0	2	5
Lard, . . . . .	255	26	159	53	95	73	4	0	2	5
Laths, . . . . .	37		18		19		1	0	0	5
Leather, . . . . .	1143	17	-		-		4	0		
Lime, . . . . .	414	87	165	94	248	93	0	5	0	2
Liquorice, . . . . .	235	51	147	19	88	32	4	0	2	5
Liquors, . . . . .	11075	17	-		-		4	0		
Live stock, . . . . .	51	36	25	68	25	68	1	0	0	5
Machinery, . . . . .	353	57	176	78	176	79	4	0	2	0
Mackerel and fish of all kinds, . . . . .	1384	04	692	02	692	02	4	0	2	0
Mahogany, . . . . .	105	10	70	06	35	04	3	0	2	0
Marble, dressed, . . . . .	85	02	42	51	42	51	2	0	1	0
Marble, rough, . . . . .	17	24	8	62	8	62	1	0	0	5
Mechanics' tools, . . . . .	6	76	3	38	3	38	4	0	2	0
Merchandise not enumerated, . . . . .	8047	88	-		-		4	0		
Metals not otherwise designated, . . . . .	1293	62	808	51	485	11	4	0	2	5
Millstones, . . . . .	153	50	38	37	115	13	4	0	1	0
Mineral water, . . . . .	20	34	8	13	12	21	0	5	0	2
Molasses, . . . . .	4494	43	2996	28	1498	15	3	0	2	0
Moss, . . . . .	1	14	76		38		3	0	2	0
Nails and spikes, . . . . .	4283	54	2141	77	2141	77	4	0	2	0
Oats, . . . . .	97	44	48	72	48	72	2	0	1	0
Oil, . . . . .	194	35	97	17	97	18	4	0	2	0
Oysters, . . . . .	13	01								
Paper, . . . . .	31	78	19	86	11	92	4	0	2	5
Peas, . . . . .	40	68	19	17	11	51	4	0	2	5
Pig iron, . . . . .	8894	16	6670	62	2223	54	1	0	0	7
Pork, salt and fresh, . . . . .	3	90	2	43	1	47	4	0	2	5
Potatoes, . . . . .	195	53	97	76	97	77	2	0	1	0
Potters' and stone ware, . . . . .	79	59	26	53	53	06	3	0	1	0
Powder, . . . . .	659	60	412	25	247	35	4	0	2	5
Rice, . . . . .	1	08	67		41		4	0	2	5
Rye, . . . . .	55		27		28		2	0	1	0
Saddlery, . . . . .	11	10	6	93	4	17	4	0	2	5
Salt, . . . . .	7229	52	4518	45	2711	07	2	0	1	2
Seed of all kinds, . . . . .	686	84	343	42	343	42	4	0	2	0
Shingles, . . . . .	240	84	120	42	120	42	1	0	0	5
Shoes and boots, . . . . .	185	53	115	95	69	58	4	0	2	5
Shot, shell and castings, . . . . .	1459	07	729	53	729	54	2	0	1	0
Slate, . . . . .	33	27	16	63	16	64	1	0	0	5
Soap, . . . . .	244	50	122	25	122	25	4	0	2	0
Spirits of turpentine, . . . . .	5	40	3	37	2	03	4	0	2	5
Staves, . . . . .	84	20	84	20	-		0	5	0	5
Steam engines, . . . . .	245	35	122	67	122	68	4	0	2	0
Stone, rough, . . . . .	1618	13	647	25	970	88	0	5	0	2
Sugar, . . . . .	14817	80	9261	12	5556	68	4	0	2	5
Tallow, . . . . .	124	07	77	54	46	53	4	0	2	5
Tar, . . . . .	101	08	25	27	75	81	2	0	0	5

TITLE OF ARTICLE.	Am't rec'd from 1st Oct'r 1848, to 1st Oct'r 1850.		Am't by proposed reduction.		Difference.		Present rate.	Proposed rate.
	Dolls.	Cts.	Dolls.	Cts.	Dolls.	Cts.		
Timber, rough, plank, &c.	3735	80	1867	90	1867	90	1 0	0 5
Tin and tin ware,	101	06	63	16	37	90	4 0	2 5
Tobacco,	55446	50	39604	64	15841	86	3 5	2 5
Vegetables not otherwise designated,	12	02	6	01	6	01	2 0	1 0
Vanison,	37	33	23	33	14	00	4 0	2 5
Vinegar,	719	41	359	70	359	71	3 0	1 5
Wheat,	26690	26	16014	16	10676	10	2 5	1 5
Wool,	256	72	160	45	96	27	4 0	2 5
	221324	57						
Miscellaneous,	12432	70						
Total,	233757	57	149018	31	79406	66		



*List of the Officers of the James River and Kanawha Company, and of the Agents employed by them for the year ending on the 30th day of Sept. 1851.*

NAMES OF OFFICERS.	IN WHAT CAPACITY.	PAY.
Thos. M. Bondurant, -	Director, -	\$ 4 per diem.
Samuel McCorkle, -	do. -	4 do.
Thomas H. Ellis, -	do. -	4 do.
William W. Boyd, -	do. -	4 do.
Joseph R. Anderson, -	do. -	4 do.
John Y. Mason, -	President, -	3000 per annum.
Wm. P. Munford, -	Secretary, -	1500 do.
B. E. Poitiaux, -	Clerk, -	1200 do.
John Dabney, -	do. -	1200 do.
J. R. Chamberlayne, -	do. -	500 do.
S. S. Baxter, -	Counsel, -	600 do.
Wm. W. Harvie, -	Law agent, -	1250 do.
Elias L. Chinn, -	Superintendent of repairs, -	1500 do.
Smith A. Thorp, -	Master carpenter, -	675 do.
Smith Bosworth, -	do. -	650 do.
Samuel Mahoney, -	Master mason, -	700 do.
J. Snead, -	Toll-gatherer at Richmond, -	1800 do.
James A. Goddin, -	do. clerk, -	800 do.
R. H. Cunningham, jr. -	do. do. -	300 do.
Thomas McKinney, -	Toll-gatherer at Lynchburg, -	800 do.
Robert McKinney, -	do. clerk, -	400 do.
A. W. Millsbaugh, -	Inspector of boats at Richmond, -	1000 do.
Henry L. Reed, -	do. do. at Scottsville, -	600 do.
W. R. Richardson, -	Patrol lower level, -	200 do.
R. C. Nicholas, -	Ferryman, -	275 do.
Wm. H. Matthews, -	do. -	200 do.
Mayo Cabell, -	do. -	125 do.
Littleberry Tyree, -	do. -	125 do.
Elihu Henry, -	Overseer, -	250 do.
James M. Stratton, -	do. -	250 do.
Thomas T. Emmett, -	do. -	250 do.
James Gooding, -	do. -	250 do.
John W. Wills, -	do. -	250 do.
Nathaniel Mayo, -	do. -	250 do.
Bat Graves, -	Dock-master and lock-keeper. -	750 do.
S. P. Lambard, -	Master carpenter 2d division, -	600 do.
Duncan Grant, -	Master mason, do. -	900 do.
W. G. Matthews, -	Master carpenter, -	450 do.
Thomas J. Hopkins, -	Lock-keeper, -	600 do.
Pleasant Roach, -	do. -	225 do.
W. J. Faudree, -	do. -	200 do.
J. B. Tibbs, -	do. -	250 do.
Daniel Bashaw, -	do. -	150 do.
Samuel C. Tilman, -	do. -	240 do.
W. W. Pace, -	do. -	200 do.
R. Tibbs, -	do. -	150 do.
E. Mosby, -	do. -	150 do.
Ro. L. Pace, -	do. -	150 do.
Geo. W. Taylor, -	do. -	150 do.
Wm. S. Fowler, -	do. -	150 do.
Jos. W. Griffin, -	do. -	150 do.
Harris Clements, -	do. -	150 do.
Jos. Clements, -	do. -	150 do.
M. C. Denton, -	do. -	150 do.
S. S. Bugg, -	do. -	150 do.
D. Nixon, -	do. -	150 do.
Mrs. Sarah A. Viar, -	do. -	150 do.
Jos. Mosby, -	do. -	150 do.
J. N. Kidd, -	do. -	150 do.
G. Thomas, -	do. -	150 do.
David Johnson, -	do. -	150 do.

[illegible]

List of the Officers of the James River and  
Agents employed by them for the year ending

		PAY.	
NAMES OF OFFICERS.	IN WHAT CAPACITY	50 cts.	per diem.
		50	do.
Thos. M. Bondurant,	Director,	\$ 2	per da
Samuel McCorkle,	do.	600	per annum
Thomas H. Ellis,	do.	1200	do.
William W. Boyd,	do.	1000	do.
Joseph R. Anderson,	do.	1000	do.
John Y. Mason,	do.	1200	do.
Wm. P. Munford,	President,	2 50	per dies
B. E. Poitiaux,	Secretary,	2 50	do.
John Dabney,	Clerk,	2 25	do.
J. R. Chamberlayne,	do.	2 25	do.
S. S. Baxter,	do.	2 50	do.
Wm. W. Harvie,	Counsel,	2	do.
Elias L. Chinn,	Law agent,	2 50	do.
Smith A. Thorp,	Superintendent,	2 50	do.
Smith Bosworth,	Master car	1 75	do.
Samuel Mahoney,	do.	1	do.
J. Snead,	Master m	50	do.
James A. Goddin,	Toll-gath	2	do.
R. H. Cunningham, jr.	do.	15	per month
Thomas McKinney,	do.	15	do.
Robert McKinney,	Toll-g	15	do.
A. W. Millsbaugh,	do.	12 50	do.
Henry L. Reed,	Ins	12 50	do.
W. R. Richardson,	do.	15	do.
R. C. Nicholas,	Pr	12 50	do.
Wm. H. Matthews,	do.	12 50	do.
Mayo Cabell,	do.	12 50	do.
Littleberry Tyree,	do.	12 50	do.
Elihu Henry,	with dam,	1500	per annum.
James M. Stratton.			
Thomas T. Emmons.			
James Gooding,			
John W. Willis,			
Nathaniel Mayo.			
Bat Graves,			
S. P. Lambard.			
Duncan Grant.			
W. G. Matthe.			
Thomas J. H.			
Pleasant Ro.			
W. J. Fandr			
J. B. Tibbs.			
Daniel Bas			
Samuel C			
W. W. P.			
R. Tibbs.			
E. Mosb			
Ro. L. P			
Geo. W			
Wm. S			
Jos. W			
Harris			
Jos. C			
M. C			
S. S.			
D. N			
Mrs			
Jos			
J. N			
G.			
Du			

WM. P. MUNFORD, Secretary.

1. 1851.

## NORTH RIVER NAVIGATION COMPANY.

LEXINGTON, VA., Oct. 16, 1851.

*To the Pres't and Directors Board P. Works,  
Richmond, Va.*

GENTLEMEN,

Herewith you have the annual return of the North river navigation company for the past year, which I hope may prove satisfactory.

The annual meeting of the stockholders was held on Friday, the third day of October, at which meeting officers were elected for the ensuing year. The former president declined having his name before the stockholders for office; whereupon, Wm. McCorkle was elected president, and Henry B. Jones and Robert Morrison directors on behalf of the company for the ensuing year. The enclosed returns I would have sent you last week, but the reports of the president and secretary to the general meeting, were referred to a committee for examination, and I preferred waiting a few days for their action, which has since been had upon my report, and I now forward it without any change or alteration.

A map of the line of improvement will be furnished you as soon as the engineer can have it prepared. If there is anything lacking in my report, advise me, and it shall be furnished without delay.

I am, very respectfully, yours,

JACOB M. RUFF,  
Sec'y N. R. N. Co.

*Return of the state of the North River Navigation Company, for the year ending  
October 3d, 1851.*

Original capital stock authorized by the charter is \$ 100,000, of which there is			
subscribed by individuals 253 shares,	-	-	12,650 00
By the county of Rockbridge, 300 shares,	-	-	15,000 00
By the town of Lexington, 200 shares, \$ 50,	-	-	10,000 00
By the commonwealth, 1129½ shares,	-	-	56,475 00
Amount of commonwealth's subscription remaining unpaid,		44,221 19	
" individual	-	10,000 00	
" the county of Rockbridge,	-	11,322 04	
" the town of Lexington,	-	6,500 00	
There has been expended in the construction of the work from the organization of the company (July 6th, 1851,) to this date,		15,523 71	
For instruments,	-	190 00	
Officers' salaries,	-	1,415 00	
Engineering,	-	1,594 00	
Pay and expenses of company's hands,	-	1,454 30	
Land damages,	-	700 00	
Printing accounts,	-	108 76	
Contingencies,	-	297 98	
Expenses in preliminary survey previous to Oct. 1st, 1850,		616 39	
Received from sale of a boat,	-		43 00
Due to the Lexington savings institution for over drafts,			352 02
		<u>\$ 94,520 62</u>	<u>94,520 62</u>

E. E.

JACOB M. RUFF,  
Sec. N. R. N. Co.

*penditures of the North River Navigation Company  
year ending Oct. 3d, 1851.*

1850,	-	-	61	
nal stockholders,	-	-	1,325 75	
nty of Rockbridge,	-	-	3,677 96	
wn of Lexington,	-	-	3,500 00	
commonwealth,	-	-	12,253 81	
	-	-	43 00	
Total receipts,				<u>\$ 20,801 13    20,801 13</u>
work done,	-	-	15,523 71	
upass,	-	-	60 00	
	-	-	1,594 00	
at,	-	-	750 00	
ny,	-	-	250 00	
\$2 per day, amount,	-	-	415 00	
includes their pay from the 6th July 1850 up to Oct. 3d, 1851.]				
ences of company's hands,	-	-	1,454 30	
ges paid,	-	-	700 00	
counts,	-	-	108 76	
bles,	-	-	297 98.	
				<u>\$ 21,153 76</u>
ance due the Lexington savings institution for over drafts Oct. 3d, 1851,				<u>\$ 352 02</u>

JACOB M. RUFF,  
Sec. N. R. N. Co.

as been subscribed by others than the commonwealth of the original				
al stock of \$ 100,000, 753 shares at \$ 50 each,	-	-	37,650 00	
increased capital of \$ 75,000, there has been subscribed by Sam.				
Reid, agent for the county of Rockbridge, 599 shares, at \$ 50 each,	-	-	29,950 00	
B. Dorman 1 share, at \$ 50,	-	-	50 00	
Amount,	-	-	\$ 67,650 00	

JACOB M. RUFF,  
Sec. N. R. N. Co.

**RAPPAHANNOCK COMPANY.**

**OFFICE OF THE RAPPAHANNOCK COMPANY,  
October 1st, 1851.**

**JAMES BROWN, Esq.**

**SIR,**

Enclosed is the return of the Rappahannock company to the 30th September 1851. Though the revenues of the work shew an increase over those of the previous year, they are still barely sufficient to cover the necessary expenditures. They will, however, be hereafter much augmented by the accession of trade from the Hazel river and Sperryville turnpike improvements. Two new dams, of the aggregate length of six hundred feet, have been built by the company since last report, which, with other improvements required for the greater security and capacity of the work, have increased the general expenses some twenty-five hundred dollars. The ordinary repairs and agency have not materially exceeded six thousand dollars. The work is in good order. The list of stockholders as per last annual report.

Very respectfully,

Your ob't serv't,

**WELLINGTON GORDON, *Pres't.***

*State of the Rappahannock Company, September 30, 1851.*

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---

Expended in construction previous to 1846, by the old company,	-	58,280 03
Expended in construction from January 1, 1846, to this date,	-	*281,592 62
Expended in repairs by old company,	-	5,000 00
Expended in repairs from 1846 to Sept. 30, 1850,	-	11,632 57
Expended in repairs from Sept. 30, 1850, to date,	-	8,549 82

**Assets:**

Real estate owned by the company,	-	1,100 00
Debts due the company,	-	505 97

\$ 366,661 01

**Capital stock paid in:**

390 shares by individuals, at \$100,	-	39,000 00
Due contractors for construction,	-	*201,796 25
Due state of Virginia for loan,	-	*100,000 00
Due Wellington Gordon for repairs,	-	5,892 07

**Received from tolls: \***

Prior to 1846, by old company,	-	5,000 00
From 1846 to September 30th, 1850,	-	6,733 80
From September 30, 1850, to date,	-	8,238 89

\$ 366.661 01

**M. H. CRUMP, Sec'y.**

*September 30, 1851.*

\* Exclusive of interest.



## RIVANNA NAVIGATION COMPANY.

The law of the last session of the legislature directed a subscription on the part of the Board of public works to the original stock of the Rivanna navigation company of \$55,675, and also \$20,000 to the new stock of the company upon the subscription of \$1,333 33 by individuals, making, when this subscription shall be obtained, \$——; this sum is to be increased by amount of arrearages and debts due the company, in solvent hands, of about \$5,000, making the sum of \$93,000 as an available fund for the enlarged improvement.

The obstruction to the navigation from the connection with the James river canal has for the past year entirely suspended the collection of tolls, but these works are now being completed and the dam and locks at Cary's Brook will be ready for the passage of large size horse boats by the first of December, and before the 25th December the navigation for such boats will be accomplished to Palmyra, a distance of 14½ miles, by a crib dam at the Rivanna mills, making slack water navigation upwards of six miles and a half to Cary's Brook and a canal four and a half miles to Columbia, giving one unbroken sheet of water for eleven miles without a lift lock. The dam at Cary's Brook throws the water back to Palmyra, for boats drawing four feet water 3½ miles further; in the 14½ miles there is but one lock. These works have been constructed in a style and manner uniting strength and durability unknown upon this river, and promising permanent utility. The tolls will be resumed by the first of January next and in the two next years will add in the unfinished state of the work eight or ten thousand dollars to the company's resources, making them equal to \$100,000 or more.

The estimates of the engineer (which are deemed abundantly liberal) of the entire cost of the improvement to Charlottesville is \$137,000, including damages; this shews a deficit of \$37,000. From the greater difficulties encountered as it approaches the mountain, the funds of the company will complete the work to Stump Island six miles below Merriwether's bridge.

The deeper interest felt by the farmers residing above Southwest mountain in the work, and the more liberal subscriptions anticipated, will require a simultaneous prosecution of the work above Merriwether's bridge with that below. Should these anticipations be realized, justice to them requires the assurance which would be thus given of a simultaneous enjoyment also of the benefits of the improvement with those who have been more supine and indifferent to its advantages.

We have to regret the entire loss of the expenditure upon the Cary's Brook dam incurred during the last year, from an injudicious plan or faulty construction: it has been condemned and abandoned as worthless. The employment of a judicious and experienced engineer to direct the plan and superintend the execution, gives an assurance that we may in future escape these mortifying failures which want of skill and supervision have hitherto brought upon the company. For further details, I must refer to the report of the secretary.

TH. J. RANDOLPH,  
Pres. R. N. Co.

*Return of the state of the Rivanna Navigation Company for the year ending  
30th September 1851.*

Amount of commonwealth's subscription unpaid,	-	1,633 96	
Amount of individual subscription unpaid,	-	7,561 95	
Expended in construction of work from commencement in 1830, to date, including repairs, officers' fees, attor- neys' fees, six negroes, saw mill, boats, &c.	-	152,456 07	
Paid borrowed money and interest,	-	4,050 59	
Dividends declared from commencement,	-	25,952 84	
Cash on hand 30th September, per annexed statement,	-	38,063 78	
Capital stock, \$100,450 :			
Subscribed by individuals 1249 shares, at \$ 50 per share,	-	-	62,450 00
Subscribed by commonwealth 760 shares, at \$ 50 per share, under old sub- scription,	-	-	38,000 00
Subscribed by commonwealth under the act of the general assembly of 15th February 1851, and paid,	-	-	44,901 97
Error in last report, shewing balance due from state on stock too little, by	-	-	10 00
Tolls and other profits from commencement,	-	-	79,083 05
Dividends remaining unpaid,	-	-	1,333 50
Money borrowed from bank,	-	-	3,940 67
		<u>\$ 229,719 19</u>	<u>229,719 19</u>
Balance due from state, on account of her subscription under the act of 15th February 1851,	-	-	<u>\$12,407 19</u>

P. E. BACON, Sec'y  
Riv. Nav. Co.

List of stockholders same as reported last year.

*Statement of Receipts and Expenditures within the year.*

Balance on hand, per last report, including state bond and other good debts,	-	-	-	3,531 26
Add receipts for the year:				
For capital stock paid by individuals,	-	-	-	1,372 41
" " " " by state under old subscription,	-	-	-	994 35
" " " " " " act of 15th Feb. 1851,	-	-	-	44,901 97
Interest and premium,	-	-	-	107 50
From other sources,	-	-	-	460 79
On account of money borrowed,	-	-	-	3,940 67
Deduct disbursements:				
For improvement and repairs,	-	-	-	16,393 46
For toll collector, balance due him last year,	-	-	-	30 00
Officers' salaries.				
*Col. Thomas Macon, late president,	-	-	-	322 50
*B. H. Magruder, as director,	-	-	-	99 00
*S. C. Sneed, late director,	-	-	-	78 00
*L. M. George, late director,	-	-	-	36 00
B. H. Magruder, treasurer and secretary,	-	-	-	194 27
Dividends paid during the year, by late treasurer,	-	-	-	92 00
Balance money on hand,	-	-	-	38,063 78
				<u>\$ 55,308 95</u>
				<u>55,308 95</u>
Amount due the company upon bond and open account, deemed good,				<u>\$ 870 00</u>

\*For the year ending 30th September 1850, the account for the present year not paid, because not yet settled.

## ROANOKE NAVIGATION COMPANY.

WELDON, N. C., October 29th, 1851.

*of Public Works.*

I herewith transmit to you a copy of the annual report of the president and directors to the stockholders of the Roanoke navigation company, with a statement shewing the condition of the company on the first day of the present month, and a list of the stockholders therein, with the number of shares held by each.

I am, very respectfully,

Your ob't serv't,

A. JOYNER.

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REPORT OF PRESIDENT AND DIRECTORS.

The president and directors of the Roanoke navigation company make the following report to the stockholders in general meeting:

At your last meeting we had to give you a mournful account of disasters to your works at Danville, produced by the freshets of the past year. We at the same time anticipated diminished dividends for the present year. But in spite of a very short crop of tobacco and a very small amount of wheat for exportation, such has been the great increase from the transportation of goods up the river, that your directors were enabled to make a dividend last spring of one and a half per cent. on the capital stock, and now feel justified in recommending a like dividend from operations during the last six months, which will leave a sufficient balance in the treasury to meet all probable demands upon it. Your directors, in placing in your hands the trust which has been confided to them, congratulate you on the excellent condition of your works. The locks are all in order, and are passed with safety and despatch. The sluices are in good condition, and their passage easy and safe. The canal at the Great Falls has been, at some places, slightly obstructed; and though it has not interfered with navigation, has not in very dry seasons admitted water enough for the mills at its foot; but this inconvenience will be soon corrected by the company's hands, and a slight amount of additional labor which will involve but a trifling additional expense. It is known to the stockholders that in order to get rid of a very vexatious engagement with the owners of the Danville mill property, your directors were compelled to purchase that property, not with a view of holding it, but for the purpose of a resale with conditions more favorable to the company.

There is one subject that your directors wish to bring to the consideration of the stockholders as deeply concerning their interests. Not-

withstanding the dividends which have been declared for the last few years of from three and a half to four per cent., and the probable dividend of five per cent. for the next year, yet we continue to be mortified by sales of our stock at a price which ensures to the purchaser an interest on his investment of fifteen per cent. One reason for this—and the most important by far—is the extreme difficulty of making the transfers of our stock from the seller to the buyer. The stock by our charter is made real estate, and is transferred by the troublesome and expensive process of deeds to be regularly made, acknowledged and recorded; and such is the particularity required by the charter, that the purchaser is sometimes years in getting his title completed. The directors earnestly recommend a petition to the legislature of North Carolina and Virginia for such a change of our charter as will make our stock transferable with the same convenience to vendor and vendee as is enjoyed by almost every joint stock company in the United States.

All of which is respectfully submitted.

SAMUEL PANNILL, *President.*

*October 24th, 1851.*

*Return of the state of the Roanoke Navigation Company on the 1st day of  
October 1851.*

Capital stock, originally \$ 412,000; now reduced to \$ 395,900:		
Subscribed by individuals, 2,820 shares of \$ 100 each,	-	282,000 00
Subscribed by state of Va. 800 " "	-	80,000 00
Subscribed by state N. C. 500 " "	-	50,000 00
		<hr/>
		412,000 00
Tolls, rents, &c. from commencement of work to date,	-	208,898 20
Dividends remaining unpaid,	-	10,658 66
Sales of negroes,	-	9,628 55
Premium obtained on bills of exchange,	-	345 68
Discount on North Carolina bank notes,	-	14 24
Profit made on the purchase of bank stock,	-	4,719 50
Interest collected from stockholders,	-	8,401 20
Interest received on \$3000 of six per cent. stock of state of Virginia,	-	1,144 91
Balance of profit on \$5000 United States stock,	-	536 19
Overpaid by stockholders,	-	51 80
Hire of negroes,	-	521 07
Dividends due on 31 shares of stock sold to the company, but not yet transferred,	-	736 25
Balance.	-	5,570 60
Amount of individual subscriptions for stock unpaid,	12,166 71	
Debt due the company other than on account of stock, good debt,	78 27	
Debts due the company " " bad debts,	65 62	
Expended in construction of work from commencement in 1817,	424,575 77	
Expended in repairs for same time,	34,642 98	
Property now held by the company:		
Paid for land and mill property at Danville,	7,000 00	
Expended for interest and repairs on property at Danville,	1,772 99	
14 negro men and 3 batteaux and tools, estimated to be worth,	4,500 00	
Dividends declared from commencement,	170,973 25	
Cash on hand 1st October 1851,	7,451 26	
	<hr/>	
	\$ 663,226 85	663,226 85
	<hr/>	

withstanding the dividends which have been declared years of from three and a half to four per cent., a dividend of five per cent. for the next year, yet we satisfied by sales of our stock at a price which ensured an interest on his investment of fifteen per cent—and the most important by far—is the extension the transfers of our stock from the seller to the our charter is made real estate, and is transfer and expensive process of deeds to be regular and recorded; and such is the particularity that the purchaser is sometimes years in getting. The directors earnestly recommend a per North Carolina and Virginia for such a chance make our stock transferable with the same vendee as is enjoyed by almost every United States.

All of which is respectfully submitted

October 24th, 1851.

SAM

works at  
and Roan-  
Danville,

		12,507 32
13,114 51		
524 57		
		12,589 94
581 10		
28 99		
		552 11
320 00		
		182 27
		353 20
		15 00
		26,519 04
12,554 59		
2,519 42		
1,702 89		
1,591 68		
550 00		
150 00		
		19,068 58

Balance money on hand,

\$ 7,451 96

October 1850.  
1851.

A. JOYNER, Secretary.

## IGATION COMPANY.

HORDSVILLE, Nov. 3d, 1851.

*Works.*

annual report to you on the operations of the river navigation company, I have now, in my capacity as president of the company, simply to state the results of the company this year have been confined to clearing down by the freshets, constructing new ones, and blasting rock out of the sluices where it was done the year before. In consequence of having improved the work heretofore done, we employ a smaller number of hands as heretofore. It is believed this will be a condition for sluice navigation of batteaux at the usual tide of water. Batteaux have not been able to run the river, nor is it expected that any great use of it, farther than carrying grain, iron &c. to Danville, or adjacent country for domestic consumption, until the Danville railroad shall be completed. The board of directors has not yet met to fix the tariff of tolls, but is expected to do so. For the financial concerns of the company I beg to refer you to the report of our treasurer, Mr. Anthony M.

Respectfully, your ob't serv't,

GEO. HAIRSTON,  
*Pres. S. R. N. Co.*

In addition to the \$4,948 19 already paid out for the improvement, as shewn by the treasurer's report which accompanies this report, there yet remain claims unliquidated against the company for the president's salary, amounting to about \$1,100, making the total cost of the improvement up to 30th September 1851, say \$6,048 19.

For the extent of the improvement, length, &c. &c., see my last annual report.

GEO. HAIRSTON, *Pres.*



## [ A.]

*Return of the state of the Smith's River Navigation Company for the year ending  
30th September 1851.*

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Capital stock, \$ 12,000 :			
Subscribed by individuals 133 shares, at \$ 25,	-	-	3,325 00
Subscribed by commonwealth 199 shares, at \$ 25,	-	-	4,975 00
Tolls, rents, &c. from commencement of work to date, nothing.			
Due by the company for money borrowed, viz :			
To banks, nothing.			
To individuals, nothing.			
Dividends remaining unpaid, none.			
Amount of commonwealth's subscription unpaid,	-	2,417 50	
Amount of individual subscription unpaid,	-	777 92	
Due to company other than on account of stock, viz :			
On bond or note, nothing.			
On open account, nothing.			
Expended in construction of work from commencement in 1849			
to this date,	-	4,978 19	
Expended in land damages for same time, nothing.			
Expended in repairs for same time, nothing.			
Property now held by the company, none.			
Bank and other stocks, none.			
Negroes, real estate and other property, none.			
Dividends declared from the commencement, none.			
Cash on hand 30th September 1851, as per statement below,		126 39	
		<hr/>	
		\$ 8,300 00	8,300 00
		<hr/>	<hr/>

## [ B. ]

*Statement of Receipts and Expenditures within the year.*

Balance on hand, per last annnal report,	-	-	1,021 11	
Add receipts during the year, viz:				
Capital stock:				
Amount received from individuals,	-	-	343 68	
Amount from board of public works, nothing.				
Interest on debts due company, nothing.				
Tolls, rents &c., nothing.				
Debts received, materials sold &c., nothing.				
Money borrowed, nothing.				
Other accounts, nothing.				
Total receipts,			<u>\$ 1,364 69</u>	1,364 69
Disbursements:				
For improvements and repairs,	-	-	1,138 30	
Anthony M. Dupuy, clerk, 1 year's salary,	-	-	100 00	
			<u>1,238 30</u>	1,238 30
Balance money on hand,				<u>\$ 126 39</u>

By order of the board of president and directors.

ANTHONY M. DUPUY, *Clerk.*

N. B.—There has been no change in the list of stockholders since the last annual report; the list then furnished to the Board of public works is complete in all respects. George Hairston is president of the company, with an annual salary of \$200; and Anthony M. Dupuy clerk and treasurer, with an annual salary of \$100. There are no other officers or agents in the pay of the company.

ANTHONY M. DUPUY, *Clerk.*

UPPER APPOMATTOX COMPANY.

PETERSBURG, October 11

JAMES BROWN, JR., *Second Auditor.*

DEAR SIR,

I now enclose a copy of the annual return per Appomattox company, with a list of stockholders, a ment of tolls, &c.

I have sent the return (with the various accounts from made up) to the superintendents at Farmville for their Whether they will forward it to you, or send any other not able to say.

I am not able to furnish a map of the improvement aware that one has ever been made.

The length of the improvement is about 95½ miles.

Mode of construction and keeping in repair, is by d.

The average cost per mile is about \$2,880, including of every kind from commencement to 30th September

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*List of Salaried Officers of the Company*

Samuel W. Venable, superintendent, salary \$500

S. D. Morton, treasurer, clerk and collector of tolls per annum.

John Michaels, lock-keeper, salary \$150 per annum corn and 500 pounds pork.

Yours, respectfully,

S.

*Return of the state of the Upper Appomattox Company on the 30th September 1851.*

Capital stock, old, subscribed by individuals,	-	48,600 00	
“ “ “ “ by state,	-	12,500 00	
			61,100 00
Capital stock, new, subscribed by individuals,	-	72,000 00	
Deduct delinquent stock sold and bought by the company,	-	4,650 00	
		67,350 00	
Capital stock, new, subscribed by Board of public works,	-	48,000 00	
			115,350 00
Income from tolls, rents, hire of negroes, &c. from commencement,	-		249,555 06
Debts due from the company, other than dividends,	-		75 84
Profit on state stock sold,	-		359 25
Dividends on old stock remaining unpaid,	-	11,650 50	
“ on new “ “ “	-	1,251 00	
			12,911 50
Amount of commonwealth's subscription unpaid,	-	4,000 00	
Amount of individual subscription unpaid,	-	2,715 00	
Due to the company other than on acc't of stock,	-	4,377 48	
Profit and loss account,	-	3,059 22	
			7,436 70
Expended in the construction of the work and in repairs from its commencement, viz:			
For labor, materials, tools and various other charges, including wages of workmen, officers' salaries, &c., being balance of expense account of old stock, per account herewith rendered,	-	132,778 09	
Balance of new improvement account, per account herewith rendered,	-	122,379 29	
			255,157 38
Balance of negro account,	-	6,859 70	
Cost of suits,	-	322 37	
Interest account,	-	13,018 36	
			275,357 81
Property now held by the company, viz:			
Two mills occupied as cotton factories,	-	16,966 66	
Land,	-	2,058 31	
			19,024 97
Dividends declared from commencement, viz:			
On old stock,	-	94,705 00	
On new stock,	-	25,359 00	
			120,064 00
Cash on hand 30th September 1851, as per statement below,			7,753 17
State stock taken on account of subscription of Board of public works remaining unsold,	-		3,000 00
			<u>\$439,351 65</u>
			<u>439,351 65</u>

*Statement of the Receipts and Expenditures within the year.*

Balance of money on hand, per last annual report,	-	-	7,124 11
Add receipts during the year:			
Tolls collected,	-	-	6,759 67
Rents " -	-	-	2,911 60
Old millstones sold,	-	-	200 00
Interest on state stock,	-	-	180 00
Collected in dividends placed to credit of debtor's account,	-	-	64 00
			<u>10,115 27</u>
Total receipts,	-	-	17,239 28
Deduct disbursements during the year:			
For improvements and repairs, including provisions, timber, hire of overseers and hands, blacksmiths' work, &c.	-	-	2,183 97
Paid on account of salary of treasurer, clerk and collector of tolls, \$806 27, and lock-keeper \$100,	-	-	966 27
Paid S. W. Venable on account of his salary as superintendent,	-	-	400 00
Paid taxes on company's mills, &c.	-	-	200 70
Paid taxes on Archer's mill,	-	-	13 26
Paid J. W. Womack for services as clerk for meetings,	-	-	30 00
Paid incidental expenses, viz: Advertising, pork for lock-keeper, paper, postage, &c.	-	-	62 01
Paid dividends,	-	5,566 00	
Paid dividends in credits to debtor's account,	-	64 00	
			<u>5,630 00</u>
			<u>9,486 21</u>
Balance of money on hand, per bank and cash accounts, herewith rendered,			<u>\$7,753 17</u>
Dividend on the old stock, declared July 31, 1851, payable Aug, 15, 1851, \$10 per share.			

S. D. MORTON, *Clerk.*

Statement shewing the Quantity of Produce, &c. which passed through the Canal of the Upper Appomattox Company during the year ending 30th September 1851, and the Amount of Tolls charged thereon.

	Bbls. Flour.	Bush. Wheat.	Hbds. Tobacco.	Hbds. Stems.	Kegs Tobacco.	Boxes Tobacco.	Pounds Goods.	Bush. Salt.	Therces Lime.	Tons Iron.	Bush. Corn.	Hbds. Spirits.	Bbls. Spirits, &c.	Hbds. Molasses.	Bush. Coal.	Bbls. Fish.	Bbls. Tar.	Loads Timber.	Shingles.	Loads Wood.	Bush. Flax Seed.	Empty Barrels.	Tons Castings.	Tons Stone.	Laths.	Mill Stones.	Tons Pig Iron.	Cubic Ft. Plank.	Pounds Hay.	Bush. Peas.	Bbls. Pork.	Bbls. Beef.	Toll.	
	568½	4348	204	16	-	547½	174270	1444	102	14	897	-	131½	4	48	2	1	150	18	55½	-	-	2½	1½	-	-	-	-	-	-	-	-	\$748 62	
	903	7155	56½	17	-	858½	81390	2072	110	½	615	-	53½	1	18	½	13	6000	22	-	-	½	½	-	-	-	-	-	-	-	-	-	635 35	
	720	3723	32½	16	-	712½	37610	1592	14	2½	598½	-	128½	1	20	-	6	18000	10	2	-	-	-	-	-	-	-	-	-	-	-	-	460 93	
	929	3263½	36	10	-	442	77280	312	29	-	3435½	-	76½	3	-	-	4	12500	1	131½	-	-	-	-	-	-	-	-	-	-	-	-	-	472 30
	562	2580	57	4	-	997½	74870	52	69	7	3019½	-	112	4	24	8	17	4500	5½	45	-	26	½	-	-	-	-	-	-	-	-	-	-	505 63
	943	1503	72½	1	-	498½	213350	48	38	12½	1935	1	101½	13	20	4½	2	6000	2	17	-	30	½	-	-	-	-	-	-	-	-	-	-	532 97
	247	306	126½	14	-	900	361690	188	89	21½	1103½	1	264	20½	89	14½	6	4000	1	-	-	6	3½	-	-	-	-	-	-	-	-	-	-	817 10
	299	-	310½	10	-	938½	148280	1084	214	5½	2955½	1	161½	8	64	83	16	2000	-	-	-	-	6½	-	-	-	-	-	-	-	-	-	-	744 64
	79	-	240	2	-	625½	110220	1372	46	1½	1854	1	97	3	12	61	18	4000	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	528 12
	153	-	151½	1	-	158½	39760	272	66	½	1144½	1	75	1	-	26	-	-	1	-	-	-	2½	-	-	-	-	-	-	-	-	-	-	272 32
	245	833	230	5	-	875½	138260	832	38	5	1256	-	69½	2	64	31	-	5000	1	-	-	-	2½	-	-	-	-	-	-	-	-	-	-	605 09
	524	921	169½	-	68	790	193540	660	28	-	688½	-	104	7	-	3	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	605 64
	5472½	24639½	1686½	96	102	8344½	1650520	9888	843	70½	19483½	3½	1374½	66½	359	234½	84	62150	64½	250½	382	20½	2½	1500	6	34	702	79750	168	25	54	6928 71		



## IV. STATE IMPROVEMENTS.

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### BEVERLY AND FAIRMONT ROAD.

PHILIPPI, 25th October 1851.

*President and Directors of the  
Board of Public Works.*

GENTLEMEN,

As early as possible after settling with the gatekeepers, I submit my annual report of receipts, disbursements, progress and condition of the work on the line of the Beverly and Fairmont road up to the 30th September last, inclusive. For receipts and disbursements, see statement marked A. For amount drawn on the Board of public works, see statement marked B.

The road at this time is in very fine condition. I have had about forty-five miles repaired during the summer, and have hands still at work on the residue. There are four miles not yet received off of the contractors' hands. I am still waiting upon them to do the necessary repairs according to their agreements.

In my last annual report I gave a description of the foundations of the abutment on the west side of the Tygart's Valley river, also of the pier for the Philippi bridge. The foundation for the abutment on the east side was not at that time opened. We also got a natural foundation for this abutment by sinking it some three feet below the surface of the bed of the river. This foundation is a bed of stone coal.

I find since the abutments have been placed according to the measurement of Col. Haymond, engineer, that they set further in the river than I expected when I made my estimate of the probable amount of masonry for this bridge; together with the nature of the banks, the masonry will overrun the original estimate some five or six hundred perches. On the east side of the river I had the wing walls for 20 feet back sunk as low as the main wall—the bank being a bed of quick-sand—and to connect them well into the banks they will have to be 40 feet long at the top, which will sufficiently account for the error in the original estimate.

Col. O'Brien, the contractor, has failed to complete the masonry in the time required by his contract, but he has been very faithful and done his work well, and was getting along with a fair prospect of completing it this fall, until about the middle of September, when the typhoid fever broke out among his workmen, some 15 or 20 of them being attacked with it about the time, which nearly stopped the



work, it being nearly impossible to get fresh hands to come on the work. Consequently there has been but little done since that time, and there is no prospect at present that this job will be completed before next summer. The abutment on the east side of the river is in front one course of rock above the skew-backs, or about 25 feet high from the foundation; that on the west side is about 20 feet high from the foundation, and the pier about 15 feet high.

The Messrs. Chenoweth, contractors for the superstructure or wood work, have suspended operations, and covered their frames and timbers to lay over during the winter. Could the masonry have been done in time for them, they would have had the bridge ready for use.

Mr. J. H. Zinn, contractor for the masonry of the West Fork bridge, was progressing so very slow with that work, that I declared his contract abandoned on the 12th of August last, giving him an estimate for what work he had done, including tools, cranes, boats, &c., deducting 20 per cent. as liquidated damages, and immediately took charge of the work on state account. To more fully explain the propriety of this course, I herewith enclose a letter I received from Mr. Zinn, dated June 23d, 1851, marked C, which I presume was written with a view of my laying it before the Board of public works. I immediately on the reception of this letter went to see Mr. Zinn, and told him that I could not interfere as to increasing the price for his work, and I did not think the Board of public works would. Mr. Zinn at that time promised me that he would go on and finish the work and ask the legislature of Virginia for relief. On my return home I was attacked with the dysentery—also a portion of my family—which prevented me from getting on to that work again until in August, when I found that Mr. Zinn had undertaken to do the masonry for the Fairmont and Palatine bridge, and was giving nearly his whole attention to that work, and but little doing on the West Fork bridge. Under these circumstances I discharged Mr. Zinn from the work. I was of opinion at that time that the work could be finished in time to raise the superstructure this fall; but the difficulty in getting boarding for a sufficient force will prevent me from doing so, and we shall not be able to complete the work this fall. I shall, as soon as the weather sets in rough, suspend operations until next spring. I find the same result here as at the Philippi bridge, that the abutments set further in the river than I expected when I prepared my estimate for the amount of masonry, increasing the length of the wing walls to connect them with the banks, and increasing the amount of masonry for the abutments and wing walls about 200 perches above the original estimate, which was 975 perches, making 1,175 perches. Mr. Zinn had 446 perches laid when I took charge of the work, leaving 729 perches yet to be done. The pier I had increased in width at the base to 12 feet instead of 10 feet as required by the specifications, fearing that 10 feet would be too slender a base for a wall 34 feet in height, which will increase the amount of masonry in the pier about 60 perches, making it contain 350 perches instead of 295, the original estimate, of which 177 perches were done by Mr. Zinn, leaving 178 perches yet to do. I am of opinion, if the work is properly managed, that the work can be

done for the price contracted for with Mr. Zinn, but in this I may be mistaken, as labor and boarding are both very high at this time. The probable cost to complete the work at the price Mr. Zinn was to have will be about two thousand four hundred dollars. I have made an estimate of all expenses in carrying on the work from the 13th of August up to the 1st of October, which amounts to eight hundred and twenty dollars and twenty-eight cents, a bill of which I forwarded to the Board of public works. We had laid at that time 270 perches of the abutments, with about as many rock quarried and dressed as when I took charge of the work. From this you will see that the cost thus far has overrun the price Mr. Zinn was to do it for; but this is very easily accounted for: the cables used by Mr. Zinn were worn out. We had to get new cables for all the cranes, also to attach to the car to let the rock down from the quarry to the river, a distance of some eighty yards. We also had the railway to repair, and a crib to build to set the crane upon on the south side of the river. The principal part of this 270 perches was laid in finishing the abutment on the north side of the river, where all the rock had to be raised a considerable height. I have been on the work the most of the time myself, superintending it, and shall use the utmost economy in prosecuting the same.

The Messrs. Chenoweth, contractors for the wood work or superstructure, have suspended operations and covered their frames and timbers to lay over for the winter. Could the masonry have been done in time they could also have had this bridge ready for the travel.

From the increase of the masonry over the original estimate, there will be a deficiency in the appropriation to meet contracts and finish the bridges.

I would respectfully recommend to the Board of public works, and through them to the legislature of Virginia, a further appropriation of about three thousand dollars, which I think will be amply sufficient to complete the bridges and erect toll-houses at them.

Being necessarily compelled to be at the West Fork bridge until about the middle of this month, I was prevented from making this report at an earlier date.

The foregoing has been prepared very hurriedly; and should it not contain all the information desired by the board, anything further will be cheerfully supplied by informing me thereof.

Very respectfully submitted.

WM. JOHNSON,  
*Sup't Beverly and Fairmont Road.*

*Statement of Receipts and Disbursements on the Beverly and Fairmont Road for  
the year ending the 30th September 1851.*

**Receipts :**

<b>1850.</b>					
Sept. 30,	Balance on hand,	-	-	-	63 50
Dec. 31,	Toll collected during the quarter ending this day,	-	-	143 33	
<b>1851.</b>					
March 31,	Toll collected,	-	-	85 98	
June 30,	Toll collected,	-	-	161 68	
Sept. 30,	Toll collected,	-	-	204 69	
				<hr/>	595 68
Disbursements over receipts,				-	6 67
					<hr/>
					<u>\$665 85</u>

**Disbursements :**

<b>1850.</b>					
Dec. 31,	Paid to contractors, as per quarterly return,	-	-	90 00	
"	" for putting up gates, &c. -	-	-	19 00	
				<hr/>	109 00
<b>1851.</b>					
March 31,	Paid to contractors, as per quarterly return,	-	-	30 00	
"	" for repairs on road,	-	-	1 00	
				<hr/>	31 00
June 30,	" to contractors, as per quarterly return,	-	-	60 00	
"	" for tools, repairs, &c. -	-	-	227 82	
				<hr/>	287 82
Sept. 30,	" for repairs, &c. as per quarterly return,	-	-	-	238 03
					<hr/>
					<u>\$665 85</u>

**WM. JOHNSON,**  
Sup't B. & F. Road.

*Statement of the Amount of Drafts on the Board of Public Works, given by me to Contractors for keeping their respective Sections of the Beverly and Fairmont Road in repair according to their agreements, and to the Contractors for the construction of Bridges across the Tygart's Valley and West Fork Rivers on the line of the Beverly and Fairmont Road for the year ending 30th of September 1851.*

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Lemuel C. Warder, draft for 3 miles, \$15 per mile,	-	-	45 00
Philip Ligman, draft for 7 miles 19 chains, \$15 per mile,	-	-	108 56
Kidwell, Craver & Blagg, draft for 5 miles, \$15 per mile,	-	-	75 00
Wm. Stagg, draft for 5 miles, \$15 per mile,	-	-	75 00
David Blackman, draft for 7 miles, \$15 per mile,	-	-	105 00
James Burditt & Co., and J. N. Blue, draft for 9 miles, \$15 per mile,	-	-	135 00
			<hr/> 543 56
E. J. O'Brien, masonry Tygart's Valley river bridge,	-	-	3,189 60
L. & E. Chenoweth, wood work for same,	-	-	2,000 00
J. H. Zinn, for masonry West Fork bridge,	-	-	1,604 04
L. & E. Chenoweth, wood work for same,	-	-	1,300 00
Superintendent's salary for the year ending 24th August 1851,	-	-	500 00
			<hr/> \$ 9,137 20

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WM. JOHNSON,  
Supt B. & F. Road.

## CUMBERLAND ROAD.

WHEELING, Nov. 4, 1851.

*To the Board of Public Works.*

GENTLEMEN,

I herewith hand enclosed my monthly report for October, also my second annual report, all of which I hope will be found satisfactory in their details.

I will further remark, that owing to the long continued drought we have not had a suitable season for putting on the metal which has been prepared under the contracts for the year ending 1st November, to a very limited extent, so that at least  $\frac{2}{3}$  of the metal is now lying along and ready to be spread the first seasonable spell thereafter.

Furthermore, I will call your attention to the dilapidated state of the two bridges on the 13th section, neither of which can stand much longer without repairs of some kind, if they do not require new structures entirely like that on 12th. Our road is in good condition, both as to strength and appearance, and with the metal now ready to be put upon it, cannot fail to stand the winter's trial without any material injury.

All of which is respectfully submitted, by yours, &c.

LEWIS LUNSFORD, *Superintendent.*

*Second Annual Report of the Affairs of the Cumberland Road from November 1, 1850, to November 1, 1851.*

To balance on hand Nov. 1st, 1850,	-	-	-	701 22
To amount received from collectors of tolls,	-	-	-	6,096 17
To amount received for rent for old toll house 1 $\frac{1}{4}$ year,	-	-	-	75 00
				<u>6,802 39</u>
Disbursements:				
By contractors' list,	-	-	-	4,171 20
By amount paid Otterson on judgment,	-	-	-	449 79
By amount paid for repairs of bridge on 14th section,	-	-	-	57 81
By amount paid for rebuilding bridge on 12th section,	-	-	-	372 79
By amount paid for extra repairs,	-	-	-	190 92
By amount paid miscellaneous expenses,	-	-	-	35 45
By amount paid collectors of tolls,	-	-	-	665 00
By amount paid superintendent's salary,	-	-	-	333 30
				<u>6,276 26</u>
Balance on hand 1st November 1851,	-	-	-	<u>\$ 526 13</u>

Contractors' List, 1851.

NAMES.	Aggregate amount of metal prepared by each.	Miles or sections.	Price per perch.	Amount paid.
	Perches.		Cents.	
James Marshall, - - -	855½	1st and 2d,	78, 76,	555 00
Benjamin Gray, - - -	475½	3d " 4th,	75,	347 00
William Whissel, - - -	633½	5th " 6th,	75, 61,	287 53
Wm. Branstroop, - - -	632½	7th " 8th,	62, 61,	265 50
Crawford Thornburg, - - -	355½	9th,	76,	270 18
Wm. Helseinbein, - - -	303½	10th,	68,	206 38
Wm. Feltman, - - -	310	11th,	72,	190 00
H. Branstroop, - - -	407	12th and 13th,	74, 78,	264 26
Jos. Miller, - - -	604	14th and 15th,	84, 98,	460 34
	4577			2846 19
Amount paid in 1851 in settlement of contracts made for 1850,				1,325 01
				<u>\$ 4,171 20</u>

Amount now due contractors on contracts made for 1851, - - - \$ 426 44  
15 sections, average 71½ cents per perch.

FAIRMONT AND WHEELING TURNPIKE.

Return of the Fairmont and Wheeling Turnpike Road, constructed on State account, for the year ending 30th September 1851.

Expended for printing notices of sale, specifications and blank bonds for road,	44 75
To salary from the 29th day of March to this date, at \$ 600 per annum, -	300 00
To postage sending out advertisements, - - -	42
To seven blank books for contractors, - - -	1 25
To expenses while examining old road between this place and Wheeling,	2 91
	<u>349 33</u>
Received of the above account, - - - - -	344 75
Amount now due, - - - - -	<u>\$ 4 58</u>

I am, most respectfully,  
Your most ob't serv't,  
AUSTIN MERRILL,  
Sup. F. & W. T. Road.

## HUTTONSVILLE AND HUNTERSVILLE TURNPIKE.

HUTTONSVILLE, Oct. 23d, 1851.

*To the Board of Public Works.*

GENTLEMEN,

It now becomes my duty, by the provisions of chapter 72 of the Code of Virginia, to report the progress of the "Huttonsville and Huntersville turnpike road," committed to my charge in May last.

Under a contract of the 30th of May last, with Col. William Hamilton, the contractor for the construction of this work, operations were commenced at the northern terminus at Huttonsville, about the 15th of June last, and since that time the work has steadily progressed with a force dispersed at proper points, varying from fifty to eighty hands. Twelve miles have already been completed, which, with other portions almost completed, enables me to calculate upon the completion by the 1st of January next, of the whole distance from Huttonsville up the Valley river to the top of the mountain, separating the waters of said river and the head waters of the Elk river—a distance of twenty-two miles.

It may also be reasonable to judge that some other work beyond this point will be done this season, though its completion may be rendered doubtful from the inclemency of the winter incident to that portion of the line over the mountains at the point referred to. As the whole distance of the road is only  $47\frac{3}{4}$  miles, I may be safe in supposing the whole work will be half made by the 1st of January 1852; and with the advantages of an early resumption of operations in the following spring, the whole line will certainly be finished prior to the 1st of January 1853, the time fixed for its completion in the contract referred to.

It is but just and proper here to remark, that this work has progressed with remarkable rapidity under the great energy and almost unequalled skill and practical judgment of Col. Hamilton. He has all the time exhibited the most praiseworthy observance of duty, as well as a scrupulous regard to the terms of the contract—giving permanency to the work altogether deserving public approbation.

By the act of assembly authorizing the construction of this road, the sum of \$ 15,000 was appropriated; of that sum, it is supposed some \$ 1,200 or \$ 1,500 were expended in making the location, and by the contract referred to, the contractor is to have \$ 21,000 for the construction of the work. It is, therefore, apparent that an additional appropriation sufficient to defray the cost of construction and other incidental expenses, will be necessary. It is also obvious from this report, that this subject should receive the particular attention of the general assembly during the approaching session, as the remaining part of the appropriation of \$ 15,000 will be exhausted next spring. I sincerely hope this will be done, not only to carry out a work di-

rected to be made by the act alluded to, and for the construction of which the faith of the state was pledged ; but other considerations I am sure will prompt the legislature to give to this subject proper attention.

While upon this branch of the subject of this report, I will refer to the remarks of Capt. Kinney, the engineer of this road, contained in his report of the 16th of November last, as to the great advantages resulting from its completion, and add, that it will certainly afford an outlet to a great extent of country hitherto entirely neglected, and tend to the development of a region along the line, which in a great measure remains at this time in forest, but capable of sustaining a dense population, reaping the rewards of agricultural pursuits upon a soil giving every indication of richness and productiveness. It will only require this small boon from the hands of the general assembly to encourage a spirit that will inevitably produce these desirable results.

Respectfully submitted,

**JOHN BRANNON,**  
*Supt. H. and H. T. Road.*



## LOGAN AND KANAWHA ROAD.

BOONE C. H., VA., Nov. 10th, 1851.

*To the President, Directors, &c.  
of the Board of Public Works.*

GENTLEMEN,

In accordance with the rules established by your board, I now proceed to report the condition of the public work under my superintendence, &c.

1st. The whole length of my improvement measures 52 miles. It commences at the mouth of Len's creek, a branch of the Great Kanawha river, on the Giles, Fayette and Kanawha turnpike, and runs a west course, crossing Big Coal river at the Great Virginia cannel coal mines at Peytona; running from thence up Draidys creek over to Rock creek; from thence to Little Coal, crossing Little Coal 2 miles below Boone C. H.; thence running up Tenth creek over on to Big creek; from thence to Gyandotte river at the house of Edward Chapman, 11 miles below Logan C. H.; from thence up to the C. H. of Logan county, that being its terminus, &c.

2nd. I have completed up to this time 40 miles, with the residue very nearly completed. I have completed a stone bridge across Mill creek 22 feet high, 18 feet at its base, 15 feet at its top and 87 feet long, and I only paid for the building of it \$299. I have some half dozen other stone bridges, but of a smaller class, &c.

3rd. State and condition of resources—I hereby refer your honor to the statement that I sent to your body some time about the 1st of September, &c.

4th. That portion of the road that has been in use for three years is in a tolerable state for traveling to pass over, &c. &c.

I have no doubt but what I can by spring, if the winter should not be uncommonly cold, complete the whole of said improvement, with the exception of the bridge across Big Coal river at the Virginia cannel coal mines. It will require a bridge only about 150 feet long. It will be a great thing for the accommodation of the public, as there is no ford but a very deep and dangerous one at the crossing of Big Coal, owing to the cannel coal shoot running over the location of the road, &c.

All of which is respectfully submitted.

WILLIAM SMOOT, JR.  
*Sup't L. & K. State Road.*

*To Board P. Works, Richmond, Va.*

## NORTHWESTERN TURNPIKE ROAD.

CLARKSBURG, October 24th, 1851.

*To the President and Directors Board P. Works.*

GENTLEMEN,

I have the honor to submit the following annual report upon the Northwestern turnpike road for the quarter ending the 30th ultimo.

*Condition of the Road.*

Upon this branch of the subject, my reports within the year, up to the last quarter, having kept you duly advised, I deem it unnecessary to trouble you here with a repetition of their details. And, as nothing has occurred during the last quarter to interrupt the good condition of the road, or regular progress of the repairs of sufficient importance to be worthy of your notice in a detailed form, I may safely state, that, with slight exceptions, the dirt portions of the road are much improved beyond their condition at any former period. Operations are still in progress, directed to the work, necessary for the defence of the road against the dilapidating effects of the winter season.

Stone is in course of preparation for the repair of the macadamizing near Winchester. This work has been purposely delayed until the extensive running of light carriages pass off for the present season. Of the policy of repairing the part of the road near Winchester at a late period to favor that species of travel at a point so productive in tolls, I have previously advised the board. Burden wagons smooth the repairs during the winter, suitable for light carriages on the return of spring.

The slate capping across the sandy ridges on the 1st and 2d sections of the road, stand in need of some replenishing in places. This, as well as the macadamizing, will receive attention during intervals of good weather, after the repairs generally are suspended for the present season.

Dressing and dirting the macadamized portions of the road westward of the Valley river are nearly accomplished. I have caused the macadamizing to be dressed to a convex shape to gain the benefit of transverse drainage, and the appendant ditches to be so shaped as to afford additional width of road to enable carriages to pass each other without embarrassment. Thus far, I find a light covering of dirt of very great advantage. Wherever the travel upon it has been considerable the road has become firm and smooth. It is worthy of remark, however, that where more dirt is applied than a bare sufficiency to unite the surface, it mixes with the stones and destroys the firmness of the macadamizing. I also discover, when the dirt is sufficient only to bind the surface of the stones, it tends greatly to

their relief from wear. That kind of work, and the repairs generally, will be brought to a close for the present season during the forepart of the next month.

I deem it proper to remark, that owing to the prospect of the completion of the Baltimore and Ohio railroad to the Valley river early next year, when its travel and transit will be transferred to this road, and continue upon it until the railroad shall be finished to the Ohio river, I have caused more work to be performed, than is usually applied, from the Valley river westward to enable the turnpike to bear the additional burden.

#### BRIDGES.

The repairs and improvements are completed on the South branch bridge. The new roof is raised to a pitch affording active drainage, and it is also sufficiently braced to prevent injury from the weight of snow. The covering of the sides embrace the curved ribs, and protect them as well as all the interior timbers of the bridge from exposure to the weather. I also caused large auxiliary braces to be added to the end of each span, affording both lateral and vertical support, by which vibration is almost entirely arrested. In this new dress I flatter myself it will stand many years without much further attention.

I have had the Cheat river bridge raised, and all the under supporting timbers renewed—also large braces similar to those just described, for the South branch bridge to be added, and they have contributed very great additional strength. The work remaining to complete this bridge consists of covers for the under timbers, repairing and repainting the sides, a new roof and an additional course of floor plank. This work is unavoidably postponed at present for the want of water for sawing to enable me to procure the necessary lumber. This bridge is rather a feeble structure, and I conceive that a double floor is very important to contribute the necessary lateral stiffness, and also to render the floor firm for the passage of large droves of heavy cattle, which often become frightened from the clattering of the floor plank, as well as the view of the river through their joints; and the running over it produces great danger both to the bridge and cattle. The work of raising this bridge was performed by John J. Hamilton, Esq. upon plans similar to those I reported to you, and I conceive it to be due to him to say, that he raised this ponderous double track bridge, and restored a perfect camber and also balance on its axis as near as the warped condition of the old timbers would admit, with cheap and simple machinery, assisted by three or four hands only, and at a nominal cost.

The work of covering the under timbers of the West Fork bridge for their better preservation is in progress, with prospects of speedy completion.

Materials are in course of preparation for a new roof and other repairs of the bridge across Middle island creek.

In my last report I advised the board of the commencement of decay in the timbers of the bridge across Patterson's creek, and of the

necessity for a cover to arrest it. Consequently I have taken the necessary steps to procure the materials in the course of the approaching winter.

The Valley river bridge remains without any change since the new braces were added, and it evinces strength affording encouragement to hope that it may stand for years, if frequent attention, as usual, should be paid to keying the braces to equalize their support. But as it is in a warped and distorted condition, and withal a very flimsy structure, I conceive that no dependence can be placed upon it with certainty for its safety from day to day. And it might be well for the resources of the road to be kept in a condition to rebuild it in the event of a fatal casualty. Or it might be more prudent to prepare the necessary new timbers to add to the old ones which may answer again for rebuilding at an early period.

The other large bridges are in their usual good condition. A bridge of the smaller class was rebuilt across a run on the 9th section during the last quarter.

#### MACADAMIZING.

The contracts for this kind of work are completed, and about one thousand four hundred dollars remain unexpended. With this balance I am causing some additional metal to be applied on portions of the macadamizing on the strongest grades and our spongy soil to produce sufficient firmness, and also macadamizing the worst places in the dirt road. On the 23d mile westward of Clarksburg operations are in progress capping about one hundred rods of spongy soil nine feet wide, on straight lines and varying to fifteen feet wide in short curves. I entertain hope of accomplishing this kind of work, as far as the unexpended balance will extend, during the course of the present quarter.

I deem it proper to state, that upon the completion of the inconsiderable amount of macadamizing in progress, about 58½ miles will be completed westward of the Valley river. It varies in width from 13 to 18 feet, but chiefly 15 to 16 feet wide. The remaining portions of dirt road between the Valley and Ohio rivers amount to about 46½ miles; and being remote from towns or places of any considerable concentration of travel, I conceive that a width of thirteen feet would be sufficient to macadamize. At that width about eighty thousand dollars would accomplish it.

#### TOLLS, ETC.

The receipts from the toll-gates in the year just expired exceed the amount of those the last preceding year, \$919 43.

This increase is mainly attributable to the travel produced by the construction of the Baltimore and Ohio railroad near this. That road, however, has been recently completed from Cumberland to Oakland, a few miles westward of the summit of the Alleghany, and has superseded about fifty miles of the turnpike in the largest amount of its

transit and some of its travel. But as the railroad extends westward to the Valley river, the travel will increase on the western end of the turnpike, from which an increase of tolls may be expected to swell the amount beyond the present yearly aggregate, and continue until the railroad is completed, and probably until the Northwestern railroad may be completed, for the location of which the engineers are now in the field.

Whilst the prospects are favorable for an increase of tolls for a few years, they are also favorable, from the excellent condition of the road and new macadamizing, for a diminution of the expenses of repairs a few years. Except the Valley river bridge and inconsiderable repairs of others in progress, (before noticed) the same may also be said of the bridges.

Notwithstanding the present flattering prospects of the road, I will beg leave to recommend an increase of tolls upon the macadamized portions, to meet a timely demand for their repairs.

I will again beg leave to bring to the notice of the board, that upon the completion of the railroad to the Valley river bridge and town of Fetterman, (it passing through the latter,) the present location of the toll-gate at that point will be rendered entirely unsuitable, from the near approach of the road to the toll-house, by which the latter will be deprived of some of its conveniences, such as the well and probably the kitchen. Besides, in the midst of the business of the railroad the residence would be unsuitable for those employed in the toll business; also there would be a loss of tolls from those coming eastward to the town of Fetterman, as they would not approach the gate on the west side of the town—hence I must suggest the propriety of erecting gates on both sides of Fetterman. That for the west side to be placed at the west end of the Valley river bridge, for which a lot would have to be purchased and buildings erected. For the east side accommodation might be obtained at a private house, until better experience would enable the superintendent to select the most eligible location for the gate, which the new travel in a short time would indicate.

I deem it proper to revert to the falling off in the driving of cattle upon this road from the Western states, caused by macadamizing it. It is a great loss to the road itself as well as to the country through which it passes. And I again beg leave to recommend the construction of a side road on the most favorable ground, and to apply a light capping of soft slate on such places of the macadamizing as should be adopted along deep cutting too expensive for side roads. This would entirely remove the objection drivers make to it, as well as afford great relief to the macadamizing, as the general travel would adopt the side road in preference whenever practicable. Notwithstanding the smoothness the macadamized road has assumed since the application of dirt, the travel leave it for the sideways, even at an inconvenience of passing from one to the other.

I respectfully submit the following statement upon the financial condition of the road on the 1st instant, October 1851 :

Balance on hand 1st October 1850,	-	-	2,651 62
Tolls received to 1st October 1851,	-	-	12,857 97
			<hr/> 15,509 59
Disbursements :			
For ordinary repairs same period,	-	7,533 34	
For improvements &c., same period,	-	3,405 28	
		<hr/>	10,938 62
Balance on hand on deposit in Bank at Romney,			4,570 97
Add the following claims viz :			
Due from Jesse Hildebrand,	-	-	29 32
Due from John W. Oddie,	-	-	140 99
Due from James Hardman,	-	-	28 68
			<hr/> 4,769 96
Deduct claim allowed Z. Kidwell,	-	-	350 00
			<hr/>
Total amount of cash and claims on hand,			<u>\$4,419 96</u>

The amount of cash on hand will be sufficient, with the accruing tolls over and above the expenses for repairs of the road, to complete the repairs and improvements in progress upon the bridges, and also to build other bridges most in demand, viz : one across the north fork of Hughes' river, on the 10th section ; one across Bond's creek, on the 11th section, and one across Mill creek, on the 3d section. The two former would accommodate the travel from the railroad to Parkersburg, and will be in demand at an early day. The latter (Mill creek) proves very troublesome from ice in the winter, and its freshets frequently obstruct the travel. As the increased tolls upon that section over and above others present strong claims, I will beg leave to urge upon your most favorable consideration the propriety of building it at an early period. I would be glad to receive early instructions for the three bridges at an early day, to enable me to procure the necessary lumber from saw mills in the course of the next winter, and also to take other steps to bring them into use at a period as early as practicable.

I respectfully submit the accounts for the last quarter, and beg leave to refer you to them for details. The cost of the repairs of the road per mile the last fiscal year (just expired) is about thirty-two dollars, differing but very little from the cost of the preceding year.

Respectfully submitted, by

Your most obedient servant;

JOSIAH D. WILSON, *Sup't.*  
N. W. T. Road.



## OHIO RIVER AND MARYLAND TURNPIKE ROAD.

MOUNT LINNÆUS, 27th Oct. 1851.

W. R. DRINKARD, ESQ.

*Sec. of Board of Pub. Works.*

DEAR SIR,

I herewith send you my annual report, hoping that the late period at which it has been forwarded may not produce any serious inconvenience. I have been laboring under a severe cold which affects my eyes so that I am compelled to have a copyist, who, in making the copy, has made some mistakes which have produced the erasures which you will discover, but I think the statements are now correct, and may be relied on. You will be pleased to lay my report before the board at your earliest convenience, and to present me kindly to Messrs. Brown, Johnson and Parker.

I am, Sir,

Your very ob't serv't,

W. J. WILLEY.

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*Annual Report of the Superintendent of the Ohio River and Maryland Turnpike Road for the year 1851.*

MOUNT LINNÆUS, 22d Oct. 1851.

To the President and Directors of the Board of Public Works.

GENTLEMEN,

I have the honor to submit my annual report of the operations upon the Ohio river and Maryland turnpike road during the year ending on the 30th day of September last.

For convenience and accuracy of description, I have divided this line of improvement into three divisions: the first division extends from the state line in Preston county, to near Indian creek in Monongalia county, a distance of forty-one miles by recent measurement, and embraces all the road constructed by the Fishing creek and Brandonville turnpike company. Pursuant to instructions from the Board of public works of the 11th of June, the reparation of this division was let to contract on the 16th of July following, and by the terms of the contracts entered into, was to have been completed by the first of October following, except the fifth section, which was let to Mr. Samuel Darnell at a later period, and was not required to be completed till the first of December; but the scarcity of labor, oc-

casioned by the great demand for it upon the line of the Baltimore and Ohio railroad, and perhaps some want of energy on the part of the contractors, delayed the completion of the repairs until the month of July last, a period much later than was anticipated when the work was begun.

From that period to the present, this division of the road has been in most excellent condition. The bridge across Meadow run, west of Morgantown, built by Mr. Joseph Hite, is a handsome and substantial structure of the kind, and bears evidence of the skill and honesty of the builder. Early in October last, I addressed the board, asking their permission to put gates upon that part of this division east of Morgantown, which was nearly complete, suggesting at the same time the points at which I thought they should be placed. On the 8th of November, I was instructed by the board to put up gates at the points indicated; accordingly, I had gates made and put up, and late in January I succeeded in procuring suitable persons to keep the gates. Contracts and bonds were entered into by these persons; the proper oaths taken, and the certificates thereof forwarded to the Board of public works, to be by them filed in their office as prescribed by law; and about the 26th of January they commenced demanding and receiving tolls upon thirty-one miles of the road, the receipts and disbursements of which will be found in a statement at the close of this report.

Early in the spring I reported to the board the very bad condition of this division of the road, suggesting at the same time that there were some funds arising from tolls which might be applied to repairs, and asking them to inform me whether they wished me to let the repairs to contract, or to organize a company and supply them with tools, and have the repairs made by them; but owing I presume to the large amount of business pressing upon the board at the time this communication was forwarded, no answer has been received. I awaited the action of the board upon this subject till the month of May last, when I took the responsibility of organizing a company, procuring the necessary tools, powder and fusees, &c., and put them to work under the management of Mr. George Blaney, a competent road maker of unimpeachable character and industry. To Mr. Blaney I was to pay one dollar per day; the wages of the other men I limited to eighty cents per day, an account of which will be found under the head of disbursements at the close of this report. After one month's experience it was found that this company could not operate successfully without a cart and horse, or cart and oxen. Mr. Blaney preferred the latter; having no disposable funds at command, I determined to furnish my own cart and oxen, which was immediately done; and I am informed by Mr. Blaney that the progress of the work is greatly facilitated by this additional outfit.

On the 2d of August last I was instructed by the board to put up gate No. 4 on the west side of the Monongahela river near Morgantown. On the 5th of September a gate was erected according to instructions, and I contracted with Moses D. Wells to collect the tolls at this gate from and after the 12th of the same month. My quarterly settlement



with gate-keepers having taken place on the first of September, I have had no means of knowing the amount of tolls that may be received at this gate quarterly, but I suppose it will be the most productive gate upon the line.

The 2d division commences near Indian creek, and terminates near the head of Buffalo creek in the county of Marion, embracing the thirty miles relocated by Col. Luther Haymond in the fall of 1849, and let to contract on the 16th of July 1850, and by a stipulation in these contracts was to have been completed by the 1st July 1851. But from various causes, some of which were beyond the control of the contractors, five of the six sections of which this division is composed are still incomplete. The first section, awarded to Hiram Smith, is in a forward state, and may be finished by the 15th of December. The second, awarded to Messrs. Thomas & Scott, was completed early in September last. The third, awarded to Benjamin Jodan, was greatly retarded by alterations to accommodate the Baltimore and Ohio railroad, and by slips from the banks above and by slips below the road, occasioned by the excavations of the railroad. This section, therefore, cannot be completed with the present force till late in January. The fourth section, awarded to Norval Davis, is similarly situated, if not worse, for there is an alteration yet to complete for the accommodation of the railroad company, and a great amount of labor to be done in removing slips and restoring the travel way to its proper width. The fifth section, awarded to Jesse T. Morgan, is in a more advanced stage. Mr. Morgan is now dressing up, and will with his present force probably complete the section by the 1st of December. The sixth section, awarded to John Felton, is not difficult to complete, nothing remaining to be done except dressing up, and might soon be completed with a small force, but there is no force upon it at this time; and for reasons assigned in a former communication, it is not in my power to say at what time this section will be completed under the present arrangement. Upon this division I contemplate erecting a toll-gate near Fairmont early in November, at which half tolls will be collected till the first section shall have been completed, when full tolls will be demanded. It is out of my power to point out with any degree of accuracy the time at which we may put up gates upon that part of this division west of Fairmont. That part of this work that has been completed warrants the opinion that when the division shall have been finished, it will compare favorably with any work of the kind in the northwestern part of the state.

The Baltimore and Ohio railroad and the Ohio river and Maryland turnpike road have both been located on the north bank of Buffalo creek, from a point on the lands of Jacob Snoderly to Piles' fork, a distance of eleven miles. By the terms of the charter of the Baltimore and Ohio railroad company, they have power to occupy such portions of the location made for the turnpike as may be necessary for the construction of the railroad, by indemnifying the commonwealth for all losses she might sustain in making a new location and constructing her work upon it; the power conferred upon this company has been exercised at fifteen different points within the eleven miles

alluded to, subjecting the commonwealth to the additional expense of making locations around these points of interference, and constructing her improvement upon ground much more rugged and expensive. On the 15th of July 1850, I was instructed by the Board of public works to enter into such contract with the Baltimore and Ohio railroad company as would indemnify the commonwealth for any loss she might incur by reason of these changes in location and construction, and such other items as might properly be chargeable to that account. Accordingly negotiations were opened between the agents of the company and myself, which lasted till February 1851, when a contract was consummated and signed in duplicate, one copy of which was forwarded to the president and directors of the Baltimore and Ohio railroad company by George McLeod, Esq. who was the agent acting for the company at the time the contract was consummated. The other copy was forwarded to the president and directors of the Board of public works for ratification or rejection. The near proximity of these lines of improvement upon Buffalo creek has given rise to almost every species of vexation and trouble that public works are heirs to—and they are not few nor inconsiderable—and I think we may anticipate their continuance till both improvements shall have been completed. The 3d and last division of this improvement commences near the head of Buffalo, and extends to the Ohio river at the mouth of Fishing creek in the county of Wetzel, and embraces the thirty-seven miles and a fraction relocated in the spring of 1850 by Col. Luther Haymond. In August of the same year, proposals were invited for the construction of the whole thirty-seven miles composing this division, but when the proposals were received, it was ascertained that the money appropriated would not be sufficient to complete the whole division. I, therefore, early in September 1850, forwarded to the board a statement shewing each bid or proposal in detail, accompanied by a recommendation that the 9th and 10th sections be suspended until a further appropriation should be made. The board approved the recommendation and suspended these sections, and on the 18th of October I was instructed to enter into contracts with the preferred bidders of the 7th, 8th, 11th, 12th, 13th and 14th sections of this division, which was accordingly done in the month of November, and the contracts and bonds forwarded to the board for ratification or rejection, except the contract and bond of Mr. Edward Parrish for the construction of the 8th section, which was not executed till late in the winter, when it was forwarded to the board for ratification; but I am not advised of any action being had upon them, which, in connection with other reasons, has had the effect of suspending the 8th section. Also there are therefore only five sections of this division under contract; they are progressing well, and will probably be completed during the winter, except the 7th, which may not be completed quite so soon. The work upon this division, so far as it has progressed, is quite substantially done. There are four miles of the 11th section completed, three of the 12th, four of the 13th, and the 14th was completed in August last; the 7th is not in so forward a state.

I was instructed on the 31st of January last to let the building of the Little Fishing creek bridge to contract, and to select the plan upon which it should be built ; but presuming that the board desired me to keep within the estimate made by Col. Haymond, and believing that such a bridge as was demanded by the wants of this road at that point could not be built for that sum, I wrote to the board stating that if it was the desire of the board that the expenditure for this purpose should not exceed the estimate of Col. Haymond, they were requested to furnish the plan upon which it should be built. I awaited an answer from the board on this subject until late in July. While I supposed my communication on this subject had been neglected or overlooked, I prepared drawings and specifications for the bridge upon three different plans, and deposited them in the clerk's office of Wetsel county, for the inspection of all persons wishing to examine them, and invited proposals through the newspapers and by hand bills upon all three plans ; and after the time for sending in proposals had expired, I took the proposals from the office and forwarded them to the board, accompanied by the drawings, to enable them to select the preferred bidder, and the most approved plan. There are four other bridges unlet and unprovided for, of spans varying from sixty to ninety feet, three of which, according to the estimates of Col. Haymond, which I think will be found quite low enough, will cost \$ 4,200 ; to this sum may be added \$ 800, the probable cost of reconstructing the Sandy creek bridge : thus it will be seen that, to complete all the bridges upon this line, it will cost at least \$ 5,000. The appropriations for the completion of this work, since it became the property of the commonwealth, amounts to \$ 4,500. Of this sum, there were expended in the year ending on the 30th Sept'r 1850, for construction, repairs and superintendence, \$ 3,139 58 ; and for the same objects, there were expended during the year ending on the 30th September 1851, \$ 28,153 34, and \$ 2,321 drawn from the railroad fund created by the contract entered into on the 31st January last by the Baltimore and Ohio railroad company and the Board of public works ; and since the 30th of September last, there have been expended for the same objects \$ 3,529 20. The drafts upon the treasury for construction, repairs and superintendence, amount to \$ 34,822 12, leaving in the treasury at this time, an unexpended balance of the above appropriation of \$ 45,000, amounting to \$ 10,177 87.

There will be due to contractors, under contracts now existing, as the work may be completed between this time and September next, twelve thousand four hundred and six dollars and fifty cents, in the following sums to the following named persons, towit :

To Joel Ridgeway,	-	-	-	-	-	128	00
Hiram Smith,	-	-	-	-	-	1,340	00
Thomas & Scott,	-	-	-	-	-	110	00
Benjamin Jodan,	-	-	-	-	-	588	00
Norval Davis,	-	-	-	-	-	570	50
Jesse T. Morgan,	-	-	-	-	-	612	50
John Felton,	-	-	-	-	-	600	00
John M. King,	-	-	-	-	-	3,020	00
Caleb Headly,	-	-	-	-	-	1,160	40
King & Donohue,	-	-	-	-	-	1,977	60
Matthias Whiteman,	-	-	-	-	-	2,045	50
King & Donohue,	-	-	-	-	-	254	01
							<hr/>
							<u>\$12,406 51</u>

Leaving a balance, after exhausting the appropriation, of two thousand two hundred and twenty-eight dollars and sixty-two cents. To this ascertained excess may be added the cost of constructing the 8th, 9th and 10th sections, which have not been let to contract, and the cost of constructing the Little Fishing creek bridge, for which proposals have been received but no contract entered into. These sections will probably cost seven hundred dollars per mile, and the bridge across Little Fishing creek \$1,300; and two hundred dollars will probably be required to pay Messrs. Jodan, Felton and King for giving six feet additional width to one small bridge on each of their contracts, which will not be called for until these sections are dressed up and the work measured. Thus we will have an aggregate deficit of a pretty well ascertained sum to the amount of nineteen thousand dollars, to say nothing of superintendence. Beyond these sources of excess there have been some twenty suits instituted to recover condemnation damages, none of which have been tried, owing to the immense amount of business that was upon the docket before these suggestions were filed. If these recoveries shall be had against the state instead of the counties through which the road passes, of which I have but little doubt, they will greatly augment our liabilities. Most of these suggestions having been filed since my last annual report, thereby increasing the probable excess beyond what I calculate at the time of making my report, I therefore beg leave to recommend to the Board of public works, and through them to the legislature, to appropriate a further sum of twenty-two thousand dollars instead of the fifteen thousand dollars recommended in my last annual report, which will probably complete the whole line of improvement as originally contemplated.

All of which is respectfully submitted.

W. J. WILLEY.

*Statement showing the amount appropriated for the Construction and Repara-  
tion of the Ohio River and Maryland Turnpike Road, and of the several  
Sums expended thereon.*

Amount of appropriation,	45,000 00
Amount expended in the fiscal year ending the 30th Septem- ber 1850, as per last annual report,	3,139 58
	<u>41,860 42</u>
Amount paid John Scott, for repairs, as per drafts,	2,262 07½
“ Joel Ridgeway, “ “ “	838 40
“ Samuel Darnell, “ “ “	1,468 00
“ Hiram Smith, for construction, as per drafts,	2,285 00
“ Thomas & Scott, “ “ “	3,790 00
“ Benjamin Jordan, “ “ “	2,762 50
“ Norval Davis, “ “ “	2,439 50
“ Jesse T. Morgan, “ “ “	2,762 50
“ John Felton, “ “ “	2,890 00
“ John M. King, “ “ “	595 00
“ Caleb Headley, “ “ “	2,189 80
“ King & Donohue, “ “ “	1,907 40
“ Matthias Whitman, “ “ “	2,014 50
“ King & Donohue, “ “ “	1,316 57½
“ Joseph Hite, “ “ “	368 00
“ Jesse Mercer, “ “ “	61 57
“ Price Snider, “ “ “	89 00
“ George Blaney, “ “ “	94 05
“ Wm. J. Willey, superintendent, as per vouchers,	1,548 87½
	<u>31,682 54½</u>
	<u>\$10,177 87½</u>

WM. J. WILLEY.

*Statement shewing the amount of Tolls received at Gates Nos. 1, 2 and 3 of the Ohio River and Maryland Turnpike Road.*

Received at gate No. 1, from 26th January to 1st March 1851,	-	-	26 00
“ “ “ “ 1st March to 1st June 1851,	-	-	65 00
“ “ “ “ 1st June to 30th September, 1851,	-	-	60 00
Per centage for collection deducted at 10 per cent.	-	15 10	
Received at gate No. 2, from 26th January to 1st March 1851,	-	-	17 00
“ “ “ “ 1st March to 1st June 1851,	-	-	45 00
“ “ “ “ 1st June to 30th September 1851,	-	-	43 00
Per centage for collection deducted at 12 per cent.	-	12 60	
Received at gate No. 3, from 26th January to 1st March 1851,	-	-	115 38
“ “ “ “ 1st March to 1st June 1851,	-	-	71 00
“ “ “ “ 1st June to 30th September 1851,	-	-	64 00
Per centage for collection deducted at 10 per cent.	-	25 03	
			506 38
			52 73
			453 65
To cash received from Mr. Stuart, for rent of toll-house,	-	-	4 00
			<u>\$ 457 65</u>

NOTE.—Of the \$115 38 received at gate No. 3, from the 26th January to the 1st March 1851, \$26 were received in labor of the citizens living along the line, who paid their tolls by the quarter, for which the superintendent has no receipt.

WM. J. WILLEY.

[ Doc. No. 18.]

sent showing the amount of Tolls received, and the Disbursements of the same.

Amount received from 26th January to 30th September 1851,						-	<u>\$ 457 65</u>
Money's receipt for	-	-	-	-	-	199 98	
"    "    "    "	-	-	-	-	-	24 75	
"    "    "    "	-	-	-	-	-	25 36½	
"    "    "    "	-	-	-	-	-	25 06½	
"    "    "    "	-	-	-	-	-	4 00	
"    "    "    "	-	-	-	-	-	1 62½	
"    "    "    "	-	-	-	-	-	1 00	
"    "    "    "	-	-	-	-	-	4 75	
"    "    "    "	-	-	-	-	-	102 90	
"    "    "    "	-	-	-	-	-	4 38	
"    "    "    "	-	-	-	-	-	1 00	
"    "    "    "	-	-	-	-	-	1 00	
"    "    "    "	-	-	-	-	-	40 00	
"    "    "    "	-	-	-	-	-	29 37½	
						<u>465 17½</u>	
Citizens in labor according to the foregoing note, with which							
superintendent stands charged,							
						26 00	
						<u>491 17½</u>	
						<u>457 65</u>	
Balance due the superintendent,						-	<u>\$ 33 52½</u>

NOTE.—No account having been rendered of the labor performed by the oxen under the charge of Mr. Blaney, therefore this account will remain for settlement at the next annual report.

WM. J. WILLEY.

## RICHLANDS AND KENTUCKY LINE ROAD.

## TAZEWELL COURTHOUSE AND RICHLANDS ROAD.

WHITE SULPHUR SPRINGS, TAZEWELL CO.

November 1st, 1851.

*To the Board of Public Works.*

GENTLEMEN,

It becomes my duty to lay before you the report of my operations during the past year on the roads extending from Tazewell courthouse to the Kentucky line, embracing two roads, known as Richlands and Kentucky line road and the Tazewell courthouse and Richlands road—the length of the former 42 miles and the latter 22 miles—in all 64 miles. The road is made 18 feet wide throughout, with but few exceptions, and not exceeding 4°. Since the last report, the road has been progressing to its completion as fast as circumstances would permit. Much inconvenience has been felt from the difficulty in obtaining labor at reasonable prices, as the prices which the contractors were getting for their contracts would not enable them to procure it. In fact, at one time it was difficult to obtain it at any price. The Virginia and Tennessee railroad and the Southwestern turnpike road monopolized all the available labor in the country. There remains but 5 miles out of the 42 of the Richlands and Kentucky line road yet to be received and paid for. The liabilities of the road are \$5,276 35, which will exceed the different appropriations by a few hundred dollars. As it will be necessary to establish toll-gates, some more expenditure will be necessary, which must be provided for. As soon as toll-gates are established, the revenue from that avenue will be able to keep it in repair. Large quantities of stock, cattle, hogs, horses and mules pass out of Kentucky through this section of country, and will pass on this road into the Virginia and North Carolina markets.

The following sums are yet due on account of the Richlands and Kentucky line road on the 1st October last :

To Hen. D. Smith, contractor on the 10th and 13th sections,	297	55
Elijah Vance, “ “ 9th “	241	55
Rich'd Ferrell, “ “ 11th and 12th “	554	75
Thomas May, (1st section of 15 miles,) -	4,075	00
Smith and John Jackson, - - -	22	50
Alex'r Gibson, - - - -	85	50
	<hr/>	
	5,276	85
By the books of the 2d auditor there had been paid,	14,514	94
	<hr/>	
Total cost,	\$19,791	79
	<hr/>	



[Doc. No. 18.]

run, 8th and 9th sections of this road have been kept up  
ident, whose salary is \$ 500 per year.

1 Tazewell courthouse to the Richlands is about 22  
his distance—say 18 miles—was placed under con-  
-- \$ 373 per mile, and given to Rowland & French,  
e co eted four miles, and so far progressed with another  
---es as to have it completed early in December. The  
of \$ 8,000 was not sufficient to place the whole of the  
ner contract, leaving four miles yet to be provided for.  
rther appropriation of \$ 5,000 will be necessary to complete both  
ads, and make the connection with the Tazewell courthouse and  
turnpike. If the connection is not made, the whole amount  
at those two roads—which is \$ 27,000—will be almost lost,  
will be of little use to the community. If the connection  
will then be a line of road of about 170 miles from the  
a line to the Kentucky line, passing through one of the  
earth.

d.

Your ob't serv't,

TH. H. GILLESPIE,  
*Eng'r & Sup't.*

## SOUTHWESTERN TURNPIKE.

*To the President and Directors of the  
Board of Public Works.*

GENTLEMEN,

I have the honor to submit a report on the condition of the Southwestern turnpike, up to the 30th September, as follows :

Shortly after the date of my last annual communication, the whole of the Buchanan extension was completed. And during the early part of last summer the unfinished portions of sections 9 and 10 of the Wytheville division, about which there had been so much difficulty and delay, were also completed. The finishing of these fractions of sections required an amount of labor greatly exceeding what could have been foreseen. It was a point, however, through which it was absolutely necessary to force the work at all hazards. And it is very doubtful whether the road could have been constructed elsewhere at less cost, while it is certain that in every other respect the present location is the most eligible that could have been selected; and it would doubtless have been placed there in the first instance had it not been for the difficulties interposed.

The whole line, extending from Wytheville to Buchanan, a distance of 101 miles, is now completed; and such portions of it as have been constantly travelled over are fast becoming smooth and firm. But it requires two or three years of constant use for a macadamized road to acquire that degree of *finish* and excellence which it ultimately attains. When such shall have become the condition of the Southwestern turnpike, it may be confidently predicted that it will then favorably compare with any other work of the kind, of which we have any knowledge, either in Europe or America.

On the first twelve miles of the Marion division work has been done by Col. Lewis, amounting to \$20,821, and by others, since the first of April, to the amount of \$4,544. This amount of work has chiefly been applied to the first six miles, which are now nearly completed.

Arrangements are in progress which it is believed cannot fail to ensure the finishing of the first twenty miles west of Wytheville in a reasonable time. When this *hiatus* shall have been closed, and the sections adjacent to Marion completed, the road will then be finished from Buchanan to near the Seven Mile ford in Smyth county, a distance of 132 miles.

Eleven continuous sections, consisting of the 21st, 22d, 23d, 24th, 25th, 26th and 27th, of the Marion division, and the 1st, 2d, 3d and 4th of the Abingdon division, were transferred by Col. Floyd to different individuals during the latter part of last year. The work on these sections has been steadily progressing since that time. Six of them have been completed already, and four others will be finished in the course of a few weeks.

The 4th section of the Abingdon division, (which is the same as the

The 6th, 7th, 8th and 9th sections of this by the superintendent, whose salary is \$500

The road from Tazewell courthouse to the miles. Part of this distance—say 18 miles tract last fall at \$373 per mile, and give who have completed four miles, and so far stretch of six miles as to have it completed appropriation of \$8,000 was not sufficient road under contract, leaving four miles yet

A further appropriation of \$5,000 will be the roads, and make the connection with the Fancy gap turnpike. If the connection is expended for those two roads—which is as the roads will be of little use to the company is made, there will then be a line of road from the North Carolina line to the Kentucky line, the finest countries on earth.

Respectfully submitted.

Your obedient

1 $\frac{3}{16}$  mile of the West of this section bridge at the Seven

It has been very great, (among those first tractors, were not a distances it has been the contractor himself the foundations of the rebuilt at considerable ditches, and rip- at rains that fell during repairing of them was a

settled, and most of the a great measure been expense of repairs during heretofore.

to Wytheville is now in a smooth and firm, which

the location of the turn- Abingdon, was extended to it- Abingdon, pursues the tion of Estillville, and pass- erty, reaches the Tennessee west of Abingdon.\*

length of the Southwestern now located, will be 175 $\frac{24}{100}$  arrangement of divisions convenience:

to Salem,	23.5 miles.
Salem to New river,	38
to Wytheville,	34
Marion,	27
Abingdon,	27.3
to the Tennessee line,	20.43
to the Tennessee line,	175.23

be regarded as now completed; nearly completed, and on seven of labor has been expended. which no work has been done, except Seven Mile ford already noticed. been touched consists of two dis- continuous miles, forming a part of

and to James Anthony, Esq. formerly a principal- tly due that gentleman for me to say, that ability.

other of  $43\frac{73}{100}$  miles, extending from the line.

tractors for the construction of the works, up to the 30th of September, as appears from the bill, is \$424,113 52, which may be detailed as follows:

-	-	-	-	5,821 29
-	-	-	-	142,397 01
-	-	-	-	108,306 50
-	-	-	-	71,436 74
-	-	-	-	6,151 98
work done.)				
as above stated,				<u>\$ 424,113 52</u>

Balance remaining from former appropriations, is set at \$67,736. From which amount must be deducted to meet existing contracts now in progress; there is also set the further sum of about \$34,500 for finishing the road west of Wytheville.

When the above being made, there will result a balance of about \$67,736, which may be applied towards the construction of the road west of Wytheville.

That the western division may be relet at \$2,250 per mile, as above stated will be sufficient to complete nine miles, and extend the work to a point  $14\frac{3}{10}$  miles east of Abingdon. The balance of  $34\frac{73}{100}$  miles to be provided for, which will require a sum of \$78,142 50, exclusive of toll-houses and lots.

In my annual report I expressed a belief that the receipts of the present year would be sufficient to defray all expenses in repairing the road in repair, and also to make some return to the State.

That belief was founded on an assurance that the canal would be extended to Buchanan in the course of a year, and thereafter, which would have brought into immediate use a considerable portion of the Buchanan division, equal to three-fourths of its extent, and which previously had produced little or no revenue. The giving way of the Judith dam alone disappointed that calculation.

And notwithstanding the whole line from Buchanan to Salisbury was finished as long ago as last December, yet, for the reason that that part of the road has scarcely been used at all, either for the purposes of travel or transportation.

Toll-gates have been established on this division, but very little has been received, except at gate No. 1, near Buchanan; and at this, only for only part of a section. Gate No. 2 on the same division, established fifteen months ago, collects about 75 or 80 per cent. more than is sufficient to pay the receiver; and at gate No. 3, established nearly a year ago, it has not been thought advisable to incur the expense of paying a toll-gatherer, and therefore tolls have not yet been demanded. A receiver was appointed at this gate some months ago, who is permitted to occupy the toll-house merely for the purpose of protecting the property.

31st, reckoning from Wytheville,) reaches with Seven Mile ford, and 23<sup>3</sup>/<sub>5</sub> miles of Abingdon. No work has been done except the building of the Mile ford, which was finished last June.

The expense of repairs during the present year This owing in part to the fact that many sections received when taken from the hands of the great deal more than half finished. In some necessary to place more metal on the road than had originally furnished. On some sections common bridges had given way, and had to be cost. And on others, the embankments, curapping were so greatly injured by the frequency the spring and a part of the summer, that the task of immense labor.

The embankments having now become defects in the original construction having remedied, there is reason to believe that the the ensuing year will be much lighter than l

The whole line of road from Buchanan fine condition as it can be until it become time and use alone can accomplish.

During the early part of the present year pike which had been suspended at Abing western termination. The line, after leaving route of the Reedy creek road, in the direction for a short distance through Scott line at a point 20 miles and 2,300 feet

It is thus ascertained that the entire turnpike, according to the field notes, miles, as may be seen by the following adopted heretofore for purposes of co

- 1. Buchanan extension, extending from Buchanan
- 2. Salem and New river division, extending from
- 3. Wytheville division, extending from New river
- 4. Marion division, extending from Wytheville
- 5. Abingdon division, extending from Marion
- 6. Tennessee division, extending from Abingdon

Making the total distance from Buchanan

Of this distance, 112 miles in five others are in progress and other miles a considerable amount This will leave 51<sup>7</sup>/<sub>10</sub> miles on the building of the bridge at the

This portion which has not yet connected parcels: one of eight

\* The locating of this division was performed by the principal assistant engineer on this work. It the duty was performed with great skill

	2109 22
	1283 12
32	1090 87
1 00	1833 24
14	897 13
10 87	784 06
279 41	807 73
212 62	212 62
125 00	500 00
2981 53	10720 00

a year, and for expenses and for other purposes on hand on the

, that notwithstanding now finished have been reports from tolls have been mark, that as the finished y disconnected with any not arisen from any accident is the effect of the turnpike of the contiguous country

other great lines of transit, James river canal, the consequence business throughout its whole

condition of the two principal g they may continue as at present may be incurred in passing &c. But it is certain that they fact should be placed beyond

an opinion at this early  
 Virginia and Tennessee  
 city of the Southwestern  
 in some quarters that the  
 turnpike, and that the lat-  
 by the trade and travel, so  
 that the general assembly  
 her construction, I expect  
 an opinion to an impartial  
 wing facts:

turnpike nowhere exceed three  
 en; and for nine-tenths of its  
 degrees, or a rise of one foot in  
 ity transported by a single team  
 amount of animal power employed,  
 bear it.

which is said to be the finest in Eng-  
 grade rises as high as 1 foot in 17,  
 se is  $1\frac{1}{2}$  tons, exclusive of the ve-  
 at 25 miles a day, or from 2 to  $2\frac{1}{2}$

med that on the Southwestern turn-  
 favorable, and on which, when it shall  
 in, the same amount of means will be  
 end, a team of six horses will be able  
 the rate of 25 miles a day.\*

the merchants of Wytheville, Marion and  
 station of dry goods and groceries from  
 not exceed from \$7 50 to \$8 50 a day.†  
 rates be added 50 per cent., or if \$12 a day  
 six horse wagons, (a price that will com-  
 ry team in Virginia,) and if the broad tire be  
 reduce the rate of tolls 50 per cent., the cost  
 Southwestern turnpike, even at this high rate,  
 to 8 cents a ton per mile for *outward* freight, or  
 ardly, and the invariable rate of *downward* freight  
 is most interested,) is always one-half the other,

the Virginia and Tennessee railroad company will  
 on is not yet known. It is certain, however, that  
 porated companies, they will always put it up to  
 it will bear. And it is equally certain, if the turn-  
 to its proposed termination, that the railroad com-  
 senture to charge a higher rate than the average cost

authenticated, that a team of six horses some years ago did draw 55  
 tons, over a common earth road from Woodstock to Alexandria.  
 in to employ wagons for this purpose *by the day*, but by the 100 pounds.  
 Lynchburg varies from 4,500 to 5,000 pounds; and the prices paid for  
 vs: To Wytheville \$1 75; to Marion \$2 00, and to Abingdon \$2 25  
 The time employed to reach those places respectively is 10, 12 and 14

of transportation by the turnpike, which, as has been shewn, need never exceed from six to seven cents a ton per mile, and which is considerably lower than the average rate at which transportation has usually been furnished by the principal railroads in Virginia.\*

It thus appears that the strongest claim for preference which the railroad will have over the turnpike in the transportation of produce must arise exclusively from its greater speed. And this, in ninety-nine instances out of a hundred, will be of no conceivable importance whatever, as it can seldom be worthy of serious consideration to the farmer whether his produce reaches the canal two or three days sooner or two or three days later than a given time. And even this advantage, so far as it may affect the interest of the merchant in receiving his ordinary supplies of goods, may be counterbalanced by the fact that the railroad car can deliver its freight only at *certain fixed points*, from whence it may often be necessary to transport it several miles by other conveyances; which, being attended with the additional labor and delay of loading and unloading, will certainly involve additional expense as well as considerable loss of time, and thus, to some extent, render ineffectual the only advantage which can fairly be claimed for the railroad; while, on the other hand, the road wagon will receive its cargo at any point, and convey it at once, and with equal safety, and generally with all necessary despatch, to the point of its final destination.

But, however great may be the benefits arising from a railroad, (and this fact is not controverted,) the turnpike, nevertheless, being open and accessible at all times and to all persons, in whatever manner they may wish to use it, whether with wagons, carts, carriages or horses, upon which every man is at liberty to become his own carrier and to regulate his own movements, will be emphatically the road for the people. The daily and hourly intercourse of the community must of necessity be kept up and carried on by it, were there even a dozen railroads; a great deal of the travel and transportation of the country cannot be provided for without it; and finally, three-fourths of all the products of the country that will ultimately be transported by the railroad itself, must, in the first instance, pass a greater or less distance on the turnpike to reach it.

Hence, it appears that no serious injury to the prosperity of the

\* The following extracts from Hunt's Merchant's Magazine, volume 19, page 355, copied from the R. R. Journal, establish the correctness of this statement beyond controversy:

"*Winchester and Potomac R. R., 22 miles.*—Flour, 18 cents per barrel, grain, 10½ cents per 100 pounds, sugar, dry goods, and light bulky articles, 14 cents per 100 pounds." (Average 7 cents per ton a mile.)

"*Louisa R. R., 50 miles.*—Corn and grain, 14 cents per 100 pounds, sugar, salt, butter, 20 cents, and dry goods, 22 cents per 100 pounds." (Average 7½ cents a ton per mile.)

"*Richmond, Fredericksburg and Potomac R. R.*—Salt, sugar, butter, groceries, dry goods ½ cent per cwt. per mile." (Average 10 cents a ton per mile.)

"*Richmond and Petersburg R. R., 22½ miles.*—Sugar, salt, butter, ½ cent per 100 pounds per mile; groceries and dry goods ¾ cent a ton per mile." (Average 15 cents a ton per mile.)

From these statements, it appears that the average charge for transportation on four of the principal railroads in Virginia during the year 1848, was 9½ cents a ton per mile for the articles of flour, grain, salt, sugar, dry goods and groceries.

turnpike of the character alleged need be apprehended from the constructing of the railroad. On the contrary, the probability is that the two improvements will become auxiliary, mutually beneficial, and indispensable appendages to each other.

An evil of much more serious import than any that can arise from a mere competition for public patronage, it is apprehended will result from the collision of the two lines, at several points, and in one instance, for a considerable distance.

As I took occasion to present this subject to the consideration of the board in a former communication, I need not dwell longer on it at present than briefly to remind the board of the circumstance.

From a point about 15 miles east of Abingdon, to about 5 miles west of it, the two lines, as now located, are generally within a few feet of each other. Nor can this intervening space be materially increased if both these lines continue in the same valley.

The location of the turnpike from the Aspenvale farm (about two miles west of the Seven Mile ford) to Abingdon, may be changed without incurring much if any additional expense, and thus, the collision on the 15 miles *east* of Abingdon may be avoided; but *west* of that place, the collision can be avoided only by a change of location on the part of the railroad.

As it may be important to the interests of the railroad company that their line be permitted to occupy the College valley, especially as it approaches by that route to within 6 or 7 miles of the salt works and plaster region, I have hoped that an arrangement may be made with that company by which the collision on the long stretch of 20 miles may be avoided.

If it be thought advisable by the board to adopt any measures with a view to obviate this difficulty, I respectfully suggest that the subject be acted on at once, and previously to that portion of the work being relet.

Respectfully submitted.

JAMES H. PIPER,  
*Eng. & Sup. S. W. T.*

November 12th, 1851.





expense. Two or three other points designated for dams may be liable, in a more limited sense, to the same objection and it may be found advisable to vary their location slightly to more permanent foundations. The 5th site is at Henry's mills, called the Buffalo shoals. The 7th is at Spurlock's or the falls, where a lift is proposed of 13 $\frac{1}{2}$  feet. The fall is less than 40 yards, is nearly 6 $\frac{1}{2}$  feet. The 10th site is at Bowen & Adkins' mills, near Wayne courthouse.

At the time of making the survey the river was very low until the rainy season, when there was a rise of more than a foot. The quantity of water supplied by this stream in very dry seasons, after making due allowance for evaporation and leakage, would not be sufficient, it seems to me, for navigation; but for the greater part of the year the quantity of water, it is believed, would be sufficient.

I have no means of arriving at a very satisfactory conclusion as to the cost of erecting locks and dams, but it is probable that this kind of improvement might be constructed for the sum of \$75,000, averaging \$7500 for each lock and dam; the locks to be made of wood, and their length and breadth sufficient to pass small steamboats—say 25 feet wide and 125 feet long.

A considerable quantity of timber is floated down this river during freshets, but the mill dams and the falls are obstructions of so serious a nature as to prevent rafting in the ordinary manner in that part of the river above Luther's mills. A safe navigation for the timber within the valley of the river would seem at this time to answer the principal object in the improvement of its navigation; but whether that trade, together with the agricultural products of the country, and such minerals as may be found to exist within a practicable distance, would warrant the expense of making a slackwater navigation, I am not prepared definitely to say; but it would seem to me that the most practicable mode of improvement, in view of the expense, and of the liability of locks and dams to get out of order, would be to remove some inconsiderable obstructions found in the channel of the river, such as logs and rocks, and construct long and wide slopes at Luther's mill dam, at the falls and at Bowen & Adkins' mill dam. There are a good many abrupt turns in the river, but the channel is generally free from other objections; and with good slopes at the three points above named, it is believed that rafts of timber, and probably flat bottomed boats, might be taken down during freshets with considerable safety. The cost of erecting slopes at the three points named would probably not exceed twelve hundred dollars, and a much less sum would be sufficient to remove the obstructions met with in the channel of the river.

Respectfully submitted.

LUTHER HAYMOND, *Engineer.*

# **SURVEY OF ROAD FROM FRANKLIN TO WARM SPRINGS.**

PENDLETON COUNTY, December 4th, 1851.

To the Board of Public Works.

GENTLEMEN.

In obedience to the instructions which I received from your honorable body, I have the honor to lay before the Board of public works the following report on the survey and location for a turnpike road from the town of Franklin, in Pendleton county, via Monterey, in Highland county, to the Warm springs, in Bath county.

Previous to the location, such examinations and surveys as were necessary were made to determine the proper route for the road. And in view of the fact that Monterey has been fixed as a point by the resolution ordering the survey, the valley of the South branch, up to the mouth of Straight creek, and thence up the valley of Straight creek, proved to be the only feasible route. From Franklin to Monterey the valley of the South branch is narrow, and is bounded on its east and west sides by high and abrupt hills and mountain sides, and the river winds very often, so as to cross the bottom frequently, and sweep alternately the base of the steep hills that bound each side, completely precluding all chance of continuing a location on the levels of the bottom, without repeatedly crossing the river by bridges. I determined, therefore, to make the location altogether on one side, and preferred the west (the side on which Franklin is situated) as being decidedly the best, both as respects the cost of construction and expense of the road.

The town of Franklin stands upon an elevated table level, immediately above which the river passes through a gap in the hills, leaving extremely narrow passes on both sides. On the west side, and where the location is made, there is a narrow slip of land between the river and a ridge of high and perpendicular rocks, which for a part of the way is of sufficient breadth for the road, but not so all the way; and the necessary width must be obtained by a wall resting upon another and lower level nigh the water's edge, and in one place a dike and a wall of an average height of five feet for the distance of nearly five feet, so as to raise the road above the influence of the water at high tide. Material for either a rip-rap or rubble is at close proximity and in great abundance. After passing through this defile for the distance of 200 rods, the space between the river and the river increases in width and assumes a sideling shape, and at some places more or less steep, until the location reaches Smith's creek, a distance of two miles, crossing a spur of the mountain range. At the distance of three miles and 226 rods from Franklin comes the notable point of rocks known by the name of "The Rock" putting against and a little over the brink of the river. Here it will be necessary, in the construction of

the road, to excavate by blasting the rocks for half the width of the road, for a distance of about sixty feet, keeping the road at an elevation of nine feet above the surface of the water at low tide. A rip-rap or other wall in the river for a like height of nine feet above the surface of low water, for the distance of nearly eleven rods, will be required, and filling in conformity with the notes accompanying this report. The rocks blasted off will answer for walling and filling, and if not sufficient, others in abundance are near at hand.

The character of the ground throughout the whole route can be better imagined than described by reference to the table of estimates accompanying this report. The location is in many places on steep hill sides, containing limestone, where considerable blasting of rocks will have to be done in the construction of the road. The location crosses the South branch a few rods above the mouth of Straight creek at a good ford, distant from Franklin 16 miles 33.75 four pole chains. The size of the stream there did not seem to require a bridge. The location then pursues the valley of Straight creek, with no marked difference in the character of the ground as compared with that along the South branch, until it reaches the upper end of Adam Halterman's farm, and there the hills close in, so as to make it necessary to pursue a branch called the "Laurel run," for the distance of about ninety rods, when a tack is made in the hollow, and the location is continued, necessarily in a very zigzag direction, across a series of broken ridges, to Monterey, entering the town at the end of Spruce street, and continuing along it to High street, being the Parkersburg road. Distance from Franklin 24 miles 35 four pole chains.

From Monterey the location is continued along Spruce street to the limits of the town, and thence more or less with the present road, to the village of Woodsborough, a distance of about four miles from Monterey. At Woodsborough the location crosses the Jackson's river at a wide ford, and the same reasons that governed in making the location on the one (the west) side of South branch induced the location on the west side of the Jackson's river, varying the line from the river bottoms to the hills, as the character of the ground seemed to indicate for the best, until it reached John Wiley's farm, and thence it pursued the present road, more or less, until it reached the house of Major John Cleek; and thence through his fields, intersecting the present road again at his mill. A short distance below his mill, for the purpose of shunning a rocky point, the location ascends and crosses a low ridge, and thence it pursues along the river bank, till a short distance below the residence of Matthias Cleek, it crosses the Jackson's river again to the east side, distant from Franklin forty-six miles eight chains; and thence, leaving the river, (having crossed it at a wide and smooth ford,) the location passes over a little mountain called Rocky Ridge, to secure the rising of which a turn in the head of a hollow was rendered necessary.

From the summit of this mountain or ridge the location passes along near the old pathway to Muddy run, where it intersects and crosses the road leading from the Warm springs to the Bullpasture river via

## SURVEY OF ROAD

*To the Board of P*

GENTLEMEN,

from your honorab.  
of public works th  
turnpike road from  
Monterey, in High

Previous to the  
necessary were  
And in view of  
the resolution ord  
to the mouth of  
creek, proved to  
terey the valley  
east and west si  
the river winds  
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completely pr  
of the bottom  
terminated, th  
preferred th  
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the right, the loca-  
reaches Col. McGuffin's  
said road with its inter-  
pursues more or less  
Ludwell Brown, to the  
brough's meadow, and  
turnpike at its junction  
turnpike, where the survey  
for degrees, and much of  
maximum. The distance  
location is fifty-eight miles  
ated at fifty-eight miles.  
will shew the cost of con-  
and the average per mile;  
to the end of the first 25  
and also the aggregate amount  
and the average per mile, and

## ESTIMATES.

-	-	-	\$1200
-	-	-	700
-	-	-	320
-	-	-	800
-	-	-	550
-	-	-	700
-	-	-	400
-	-	-	500
-	-	-	640
-	-	-	400
-	-	-	640
-	-	-	700
-	-	-	500
-	-	-	320
-	-	-	500
-	-	-	400
-	-	-	350
-	-	-	700
-	-	-	500
-	-	-	500
-	-	-	500
-	-	-	400
-	-	-	300
-	-	-	450
-	-	-	400
-	-	-	400
-	-	-	300
-	-	-	320
-	-	-	500

out.  
mile.  
mile.

Thirtieth mile,	-	-	-	-	\$ 600
Thirty-first mile,	-	-	-	-	475
Thirty-second mile,	-	-	-	-	475
Thirty-third mile,	-	-	-	-	320
Thirty-fourth mile,	-	-	-	-	650
Thirty-fifth mile,	-	-	-	-	600
Thirty-sixth mile,	-	-	-	-	640
Thirty-seventh mile,	-	-	-	-	650
Thirty-eighth mile,	-	-	-	-	375
Thirty-ninth mile,	-	-	-	-	320
Fortieth mile,	-	-	-	-	475
Forty-first mile,	-	-	-	-	350
Forty-second mile,	-	-	-	-	300
Forty-third mile,	-	-	-	-	320
Forty-fourth mile,	-	-	-	-	320
Forty-fifth mile,	-	-	-	-	320
Forty-sixth mile,	-	-	-	-	400
Forty-seventh mile,	-	-	-	-	500
Forty-eighth mile,	-	-	-	-	640
Forty-ninth mile,	-	-	-	-	550
Fiftieth mile,	-	-	-	-	640
Fifty-first mile,	-	-	-	-	400
Fifty-second mile,	-	-	-	-	370
Fifty-third mile,	-	-	-	-	380
Fifty-fourth mile,	-	-	-	-	500
Fifty-fifth mile,	-	-	-	-	320
Fifty-sixth mile,	-	-	-	-	400
Fifty-seventh mile,	-	-	-	-	500
Fifty-eighth mile,	-	-	-	-	500

The average per mile for the whole route is	-	\$ 485 86 $\frac{1}{2}$
The aggregate cost of the first 25 miles is	-	13,370 00
The average per mile for the said 25 miles,	-	534 80
The aggregate cost of the last 33 miles, being from Monterey to Warm springs, is	-	14,810 00
Average per mile for said 33 miles,	-	448 78 $\frac{1}{2}$
Aggregate amount for the whole route,	-	28,180 00

Not being well satisfied with the location from Adam Halterman's farm to Monterey, I had commenced surveying another route, but was prevented from finishing it by inclement weather. Being desirous to complete it, so as to be the better able to judge of the comparative merits of both routes, I have delayed the report this long; but fearing that longer delay might subject the board to inconvenience, I have determined to forward you this report and table of estimates, and complete the survey as soon as the weather permits, and forward a report thereof, together with a map, notes, specifications and profiles of the whole survey.

Respectfully submitted.

BENJAMIN HINER.

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SUPPLEMENTAL REPORT OF SURVEY OF ROUTE FROM  
MONTEREY TO WARM SPRINGS.PENDLETON COUNTY, VA.  
Dec. 24, 1851.*To the Board of Public Works.*

GENTLEMEN,

In my communication of the 4th inst. I informed you that I had commenced running another line from the town of Monterey to the farm of Adam Halterman on Streight creek. I have, since that date, completed this survey and location, extending it to station 729 of my previous location, near the lower end of said Halterman's farm, instead of connecting it at the upper end at the mouth of Laurel run, as originally contemplated, and find the same to be 36.19 four pole chains longer than the location on the western side of Streight creek. I commenced this survey at station 1131 of my prior location in Monterey, at the intersection of Spruce with High street, (this latter being the Staunton and Parkersburg road,) and running with the S. and P. road, I pursued the same, giving its general bearings and distances, to a point near the 44th mile post thereof, being one mile and three-fourths (less three poles.) Thence leaving said Staunton and Parkersburg road at a stake marked No. 1, I proceeded with the survey across Trimble's hill to the eastern branch of Streight creek, and thence down the said branch to the point of intersection with my previous location (at station 729) as aforementioned. This location passes, very generally, over ground of a good quality for a permanent road, and is, with slight exceptions, of easy construction, being mostly through cleared land and along the present county road; consequently, in the construction of the road, much labor and expense will be saved, as well in the item of grubbing as in that of excavation. This line of survey is represented on the map by red dotted lines, extending from the point, Monterey, to the point of connection at said station 729, which is at the distance of 17 miles and 70 poles from the town of Franklin. I have estimated the cost of constructing the first mile of this line, commencing at stake No. 1 near the 44th mile post of the S. and P. road, at \$480; the second mile thence, at \$300; the third mile at \$375; the fourth mile at \$300; the fifth mile at \$400, and the sixth mile, less 17 poles, at \$300.

By connecting and running with the Staunton and Parkersburg road, as above indicated, the construction of one mile and 23 four pole chains of road less will be required than on the western line; and by reference to the foregoing estimates, it will be observed that the sum of at least twelve hundred and seventy-five dollars will be saved in the construction of the road; and should the road ever be made and built on the eastern line, it would accommodate a much larger number of the citizens of the county of Highland than if constructed on the other line.



May I be pardoned the digression here, to express the hope that the legislature will give this route (I mean from Franklin to Warm springs) that calm and dispassionate consideration demanded in its behalf, in view of the fact that it will connect with the various other improvements, which without it are isolated, and thereby rendered much less valuable, and by its completing the great thoroughfare from the Potomac border of the state along the South branch valley to the various watering places in Western Virginia? Of all the portions of Virginia, none perhaps has received so small a share of favors, in the shape of internal improvements, as the one through which this route passes; and there is no other portion wherein improvements of such character develop the natural resources of the country, and enhance the value of real estate so much, as they do in this region, as is evidenced by the late assessment of lands in the counties of Bath, Highland and Pendleton, and especially in the county of Highland, through which the Staunton and Parkersburg road passes, and where the benefits have been most happily felt and duly appreciated.

A table of notes and specifications, pertaining to the eastern survey on Straight creek, of which the above report treats, accompanies this communication. By reference to the notes, it will be seen that the said eastern or lateral survey is of the length of 7 miles and 220 rods, including the one mile and three-quarters (less three poles) of the Staunton and Parkersburg road.

All of which is respectfully submitted.

I have the honor to be

Your most obedient servant,

BENJAMIN HINER.

## NORFOLK AND PETERSBURG SURVEY.

*To the Hon. Board of Public Works, Richmond.*

GENTLEMEN,

I have the honor to submit the following report upon the preliminary surveys for the Norfolk and Petersburg railroad, with accompanying map and profile. In a previous communication I informed you of the organization and progress of the party of engineers under the direction of Mr. Henry B. Smyth, assistant, and of some of the circumstances which contributed to prolong the time several weeks beyond my expectations. After an arduous and tedious campaign these duties were brought to a close early in the present month, the line having passed for several miles through the justly termed Dismal swamp, and nearly the whole way from Norfolk in thick woods.

## GENERAL DESCRIPTION.

The survey commences at the junction of Main and Wide-water streets, in the city of Norfolk, crossing the eastern branch of the Elizabeth river at an angle of about 20 degrees with the draw-bridge, and about 120 degrees with Wide-water street, in a southerly direction, to the land of Mr. Thomas Hardy; thence crossing the county road from Norfolk to Great bridge and Princess Anne courthouse, it proceeds in the same direction, crossing several arms of the southern branch of the above river to a distance of three miles from Norfolk, where it takes a southwesterly direction, conforming to a bend in the southern branch, to a point above and opposite to Gilmerton, the mouth of the Dismal swamp canal, where it crosses the southern branch and the canal, in conformity with a provision of the charter. The distance from Norfolk to this point is 6 miles. Within this distance there are three draws required, viz: one at each of the branches of the Elizabeth river and one at the canal, and one of which I am of opinion might be dispensed with, viz: the one across the southern branch, for vessels rarely go above Gilmerton since the extension of the canal to that place; and any produce, lumber or merchandize could easily be passed under a bridge in lighters to or from any point above without serious inconvenience. Such an arrangement would be attended with saving to the railroad company; for they would thereby be relieved of the necessity of building and of employing an attendant to manage a draw, independent of avoiding the dangers of accidents which are always liable to occur at such places.

After crossing the Dismal swamp canal, a little less than a quarter of a mile from the entrance lock, the line takes a more westerly course towards Suffolk in Nansemond county, another point in the charter, a distance of 15 miles, making the entire distance from Norfolk nearly 21 miles, which, compared with the distance from Suffolk to Norfolk,

and Roanoke railroad of  $16\frac{1}{2}$  miles, is a loss of  $2\frac{1}{2}$  miles, it a secondary thought, taking into consideration the union of Norfolk and the advantages which it is believed to that city by this direct communication of her wharfs and access with the avenues to the Western trade. The line from Suffolk is quite favorable, lying for the most part upon level ground, a great portion of it through the swamp, the greatest depth, along the line of survey, is about twenty-two feet, which will afford sufficient drainage to keep the road dry. The Dismal swamp is composed entirely of vegetation, to, as nearly as I could ascertain, an average depth of 12 feet; in some places upon beds of white sand, and at others

the line, crossing the river, takes a northwest direction, and will compare favorably with any other road in the State of Virginia, of directness. See table marked B. Smith creek, one of the head branches of Nansemond, is crossed at a very favorable point for a bridge, at one mile from the depot, and Cahoon's creek, the other head of the same river, is quite as favorably crossed about two miles from the same point. After leaving this creek the line proceeds in a remarkably direct course, crossing one of the head streams of the western branch of Nansemond river, at Phillips' mill pond; crossing the natural ridge between Blackwater and Nansemond rivers, it diverges slightly to the north to cross the Blackwater river, at a point about three-quarters of a mile below Broadwater bridge, between Isle of Wight and Southampton counties. After crossing this stream, we ascend to the summit of the ridge dividing the waters of the Blackwater and Nottoway rivers, passing through the Urquhart's estates, keeping the northern slopes of the ridge, cutting off a small angle of Surry county; thence across Copperhong swamp, a tributary of Blackwater, at Owens' grove church; thence across Warrick swamp, also a tributary of Blackwater, over an undulating country, to Second swamp, one of the leading streams; thence to the main stream, which it crosses near the bridge on the county road to Prince George C. H.; thence to the summit of the ridge between Blackwater and the Appomattox, near the residence of Col. Avery. Here the line takes down the slopes of Taylor's branch to a point on the City Point or Appomattox railroad, about one mile from its depot, following parallel to this road, passing north of the depot to a junction with the Southside railroad at the cross street between Third and Fourth streets of the city of Petersburg, a distance of 79.15 miles from the toll-house in Norfolk.

The maximum grade is taken at 40 feet per mile, and this occurs in but a single instance, viz: on the last  $3\frac{1}{2}$  miles, getting down to the grade of the Southside railroad in Petersburg. It is a matter for congratulation that it does occur just where it does, at the terminus; for if a heavy trade requires it, the power can be doubled for these  $3\frac{1}{2}$  miles, and the additional distance be worked by one locomotive. With re-

gard to curvature, no radius of less than 2500 feet will be required, except, perhaps, on the  $3\frac{1}{2}$  miles above referred to.

In projecting the line between Norfolk and Petersburg, I have been governed almost entirely by the important principle of saving distance. The country generally being of so uniform a character, a bold line was deemed the best, and perhaps may prove the most economical in the end. It is a well known fact, that embankments once made and cuts once opened, exhibit, ever afterwards, but a small item in the annual bills for repairs, while the materials of which the superstructure is composed are subject to decay and wear, and consequently to frequent renewals and repairs; therefore against every additional foot in distance there are these usual annual charges. Prof. Gillespie, in his valuable manual, estimates the value of a foot saved in distance at \$12; upon one of the Pennsylvania railroads this value is taken at \$10, whilst upon some of our own roads this value is taken as low as \$3. This value however is a variable quantity, depending upon the cost per mile run. "On these grounds, a short route which has the fault of steep grades and curves of small radius, may profitably receive an outlay of capital upon it, for the purpose of lessening these defects, equivalent to the cost of the difference of distance between it and a longer line which has better grades and curves."—(Gillespie, p. 271.)

But as the value of all routes depends upon elements other than their first cost, viz: indirectness arising from increased curvature and unevenness from increased grades, I have estimated the value of the present route with reference to these elements, in order that it may be compared in these respects with any subsequent explorations, with a view to a line of cheaper construction. See table marked A.

In making up the following abstract of average cost per mile, the rail has been estimated at \$45 per ton of 2,240 lbs., about five per cent. above the present market price, to be of the V pattern, weighing 51 lbs. per yard—the superstructure and character of the road to be substantially the same as that of the Southside railroad. From the scarcity of stone along the line, this item of cost may have to be dispensed with in the construction, substituting wood and brick instead.

The average per mile is as follows:

Graduation,	-	-	-	-	3,229	31
Wooden bridging,	-	-	-	-	1,200	25
Railroad track,	-	-	-	-	5,000	00
Masonry,	-	-	-	-	1,516	10
Total,	-	-	-	-	<u>          </u>	<u>\$ 10,945 66</u>

And for the distance of 79.15 miles, gives \$866,350.

In closing this report, it may not be amiss to allude to the advantages of the Norfolk and Petersburg railroad in its connection with the Southside railroad, and of its important bearing upon the railway economy of the whole country. A glance at the map of the United States will exhibit it as a most essential link in the great chain of inter-

communication between the East and the West, which the commonwealth of Virginia, in connection with Tennessee and other southern and western states, has projected. As it is an established principle, that whenever the facilities for travel and the transportation of merchandise are increased, the travel and transportation increase in an almost incredible ratio—what may not be expected from the completion of this great central line from Memphis to Norfolk, the entire extent of which is now in process of construction, with the exception of the piece under consideration. When we consider the rapid increase of wealth and population in the southwestern states, it is almost impossible for the human mind to estimate the amount of trade and travel which must eventually pass through this south side of Virginia to the sea board. With this increased facility, affording the seller the choice of markets between New Orleans, Mobile, Savannah, Charleston, Norfolk, Alexandria, Baltimore, and I may add New York, millions of acres which, covered with the primeval forest, now lie idle, will team with the cereal grains; streams which, now unfettered and free, seek an ocean home, will mingle with their joyful noise the din of the anvil, the spindle and the lathe; the tide of emigration will increase, and the whole Southwest become a wealthy, happy and a busy people. And from the peculiarly favored position of Norfolk, combining at once the climates of a Southern, a Middle and a Western state, with the mountain passes never obstructed by snow and ice, nor yet of a temperature sufficiently warm as to endanger the transportation and storage of the perishable breadstuffs,\* the nearest point by hundreds of miles from the centre of the great Mississippi Valley to the Atlantic ocean—she must inevitably become the great grain market of America, the great commercial emporium for the whole South and West, provided this scheme, with its collateral branches, second to none in the world in grandeur of design, in magnitude and importance, involving the prosperity, the happiness and the unanimity of so large a portion of the country, and not without its influence in binding indissolubly together the conflicting interests of our beloved Union, be favored with a liberality and zeal which shall ensure their immediate completion.

Respectfully submitted.

ALBERT H. CAMPBELL, P. E.

*Petersburg, Dec. 17th, 1851.*

\* Assuming Norfolk as a given point upon the coast, and let there be drawn direct lines from the capital or centre of each state to it, the average of all these distances will be found greatly in favor of Norfolk when compared with other points, say New York or Savannah, upon the coast. The want of time and a suitable map prevents me from presenting this important fact in the more satisfactory form of actual calculation at present.

[ A.]

Measured dis- tance in miles and decimals.	Equated dis- tance in miles and decimals.	Total cost of construction.	Equiv't cap- tal to maintain.	Equiv't cap- tal to work.	GRAND TOTAL.
79.15	99.73	\$ 866,350	\$ 669,556	\$ 1,163,450	\$ 2,699,356

[ B.]

*Shewing the Excess of Railway Distance over a Straight Line joining the Termini.*

	Straight Line.	Railway Line.	Increase per centum.
Baltimore and Ohio railroad to Wheeling, Va.,	220 miles.	388 miles.	76 per cent.
Richmond, Fredericksburg and Potomac rail- road, - - - - -	58 "	76½ "	32 "
Orange and Alexandria railroad to Gordonsville,	70 "	89½ "	18 "
Norfolk and Petersburg railroad to Petersburg,	68.5 "	79.15 "	15½ "
Norfolk and Petersburg railroad from Suffolk to Petersburg, - - - - -	56 miles.	58 miles.	3½ nearly.

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REVEY.

survey for a canal from Pagan  
creek of Isle of Wight, and here  
on the same, together with the

very respectfully,

Your obedient servant,

E. H. GILL

*Survey of the  
Public Works of Virginia.*

In obedience to your instructions, I have examined the  
canal from Pagan creek to Blackwater river in  
Isle of Wight, and respectfully communicate the result  
and estimate:

In description, the line is divided into three sub-  
divisions respectively the eastern, middle and western divi-  
sions and describe in the order in which they are named.

The eastern division is  $2\frac{1}{2}$  miles in length, and embraces 61.50 feet

It commences at Tidewater in Old Courthouse creek,  
about a half above the town of Smithfield, and pursues

the creek (which will require deepening) 31 chains to  
lock No. 2, from which it is placed along the

and then ascends by lock No. 3, to the pool of Wil-

son along the southern margin of which a towing path  
has been adopted for a distance of 1 mile and 8

chains. The line then pursues the valley of the creek  
to lock No. 5, at Daniel's mill dam, the pool of which fur-

nishes a way for 13 chains, at the termination of which lock No.  
6 is reached. The line is then traced along a ravine 21 chains, and

then by locks Nos. 7 and 8, to the summit level near the residence  
of Thomas P. Ripley.

The middle division commences at the point last mentioned and  
terminates at Thomas' mill dam. It is  $4\frac{1}{2}$  miles in length, and cor-



responds with the summit level of the canal, and occupies the plane or pocomon constituting the dividing ground between the waters of Pagan creek and Rattlesnake swamp. Its eastern half embraces a deep cut through tough clay, having an *average* depth of 22 feet and 34½ feet at its maximum elevation. The remaining half will be slack water, intended to be created by raising the pool of Thomas' mill pond 13 feet above its present surface.

In connection with this division there is a navigable feeder extending from the vicinity of Thomas' mill dam along the eastern side of the valley of Mill swamp, 5 miles and 15 chains, to Gray's mill dam, at which point a lock of 6 feet lift is to be located, and the pond of the dam raised 12 feet, which will cause it to flow back about 6 miles and a half, and not only furnish an abundant supply of water for the canal, but a navigable communication extending into the vicinity of Surry courthouse.

The western division extends down the valley of Rattlesnake swamp, from Thomas' mill dam to Blackwater river, and is 5½ miles in length, and has 40 feet of lockage.

From Thomas' mill dam the line descends by locks Nos. 9, 10 and 11, in 10 chains into the valley of Rattlesnake swamp; it is then traced along the southern margin of the swamp 2 miles and 12 chains to lock No. 12, from which it is continued along the base of the rising ground bordering on the swamp 1 mile and 42 chains to lock No. 13; it is then traced 1 mile and 54 chains to lock No. 14, at the junction of Rattlesnake swamp and Blackwater river.

#### SUPPLY OF WATER.

The natural flow of water on the summit being inadequate to supply the canal, without depressing the level to such a degree as to incur an immense expense, it became necessary to resort to a feeder. For this purpose a line was examined 11 miles up Blackwater river to Wall's bridge, at which point its water was found to be but 36 feet above low tide, and the feeder from that source was abandoned.

The valley of Mill swamp was then examined with a view to the construction of a large reservoir, and a site for a mound located at Gray's mill dam; the mound will be about 26 feet in height at its greatest elevation, and the reservoir will inundate 1000 acres of land, about one-third of which is now flooded by the water of Gray's mill pond.

The surface of the water in the reservoir is designed to be 6 feet above that of the water in the summit level; and the reservoir when full is estimated to contain 217,800,000 cubic feet of available water. It is designed also to raise the water in the summit level one foot, and thereby create a reservoir of that depth, with an area (including Thomas' pond) of 300 acres, which would contain 13,068,000 cubic feet of water, which added to the Mill swamp reservoir, would furnish an available supply of 230,868,000 cubic feet of water. From the most authentic information that could be obtained, without resorting to an actual survey, it is premised that the reservoir will receive the drainage of at least 70 square miles of country.



[ Doc. No. 18.]

quantity of rain which fell at Philadelphia during the year is 39.60 inches per annum, as appears by the annual register. In the Shaw's water works in Scotland they have been supplied with water from the drainage of about  $5\frac{1}{2}$  square miles, or 284,678,550 cubic feet of water per annum, or over the annual rain that falls on that surface."

From the observations made on the Chenaugo canal in New York by Jervis, three-fifths of the whole rain were lost by evaporation and absorption before reaching the main water courses." But assuming 12 inches in depth only can be obtained, the annual flow of water from the reservoir will be 1,951,488,000 cubic feet, or nearly sufficient to supply the canal nine times in a year.

It now becomes necessary to enquire into the quantity of water that will be required to supply the canal.

In experiments made on the Erie canal, it was ascertained that the water consumed by the canal in evaporation, absorption and leakage, amounted to 100 cubic feet per mile per minute. This measurement was made the first season that the water was admitted into the canal. Subsequent experiments proved that after the canal had been in operation two or three years, the banks having settled, the evaporation was reduced nearly one-half.

From an average of several canals in France, the quantity of water required per mile per minute was not quite 47 cubic feet.

From an examination of the Ohio canal, made in 1834 by H. Hage, civil engineer, and myself, we found that 1,329 cubic feet of water per minute supplied 30 miles of that canal, being 44.30 cubic feet per mile per minute.

From an experiment on the Erie canal some years after its completion, it was found that 5,400 cubic feet of water per minute supplied 123 miles of canal, including 126 feet lockage. This is equivalent to 45 cubic feet per mile per minute.

I will take a greater allowance than either of these, and say 60 cubic feet per mile per minute will be required, and compare the available quantity with that required. There are  $10\frac{1}{2}$  miles of canal and feeder which will require to be supplied with water from the reservoir, which at 60 cubic feet per mile per minute will require 331,128,000 cubic feet of water per annum, to meet which the reservoirs will contain, when full, 230,868,000 cubic feet, being sufficient to last for a period of eight months, and have sufficient drainage to admit of being filled nearly nine times a year.

These calculations are made upon practical grounds, and the result justifies the conclusion that an abundant supply of water can be furnished without resorting to as large a reservoir as the one examined.

It may be proper to state that the plan proposed for supplying the canal with water is neither experimental nor novel. In England and France many of their canals are supplied in a similar manner, and in the United States the summits of the Ohio state canal, the Sandy and Beaver canal, the Union canal and several others, have no other means of supply.

In the year 1838, B. Aycrigg, Esq., civil engineer, addressed a cir-

cular to thirteen eminent engineers, requesting their opinions relative to supplying 14 miles of a proposed canal from the west branch of the Susquehanna to the Alleghany river with water by a reservoir which would receive the drainage of 80 square miles of country. The opinion of each was furnished in detail, and justified the adoption of the method proposed. (See Pub. Doc. House Rep. Penn., 1839.)

**ESTIMATE.**

The estimate of the cost of the canal is made on the presumption that it will be 3 feet deep, 12 feet wide at bottom, and 21 at the surface of the water; that the locks will be 70 feet long between the gates and 11 feet wide, and constructed of heart pine timber lined with plank, and that the culverts will be constructed of cypress timber.

The entire length of the canal is  $13\frac{1}{4}$  miles; the lockage  $101\frac{1}{2}$  feet, and the aggregate estimated cost, exclusive of land damages, \$300,000, or \$22,641 50 per mile.

All which is respectfully submitted.

E. H. GILL, *Civil Engineer.*

*Richmond, September 1851.*

[ Doc. No. 18.]

of Rain that fell at Philadelphia during the following years:

YEAR.					Depth in Inches.	YEAR.					Depth in Inches.
1821	.	.	.	.	32.65	1831,	.	.	.	.	43.94
.	.	.	.	.	34.96	1832,	.	.	.	.	39.87
.	.	.	.	.	39.30	1833,	.	.	.	.	46.53
.	.	.	.	.	35.62	1834,	.	.	.	.	34.24
.	.	.	.	.	43.13	1835,	.	.	.	.	39.36
.	.	.	.	.	34.66	1836,	.	.	.	.	42.06
.	.	.	.	.	27.94	1837,	.	.	.	.	39.04
.	.	.	.	.	36	1838,	.	.	.	.	45.25
.	.	.	.	.	30.17	1839,	.	.	.	.	43.79
.	.	.	.	.	23.35	1840,	.	.	.	.	47.49
.	.	.	.	.	39.60	1841,	.	.	.	.	54.85
.	.	.	.	.	32.18	1842,	.	.	.	.	46.53
.	.	.	.	.	41.81	1843,	.	.	.	.	46.81
.	.	.	.	.	38.74	1844,	.	.	.	.	40.77
.	.	.	.	.	29.57	1845,	.	.	.	.	49
.	.	.	.	.	35.14	1846,	.	.	.	.	44.35
.	.	.	.	.	38.50	1847,	.	.	.	.	45.09
.	.	.	.	.	37.97	1848,	.	.	.	.	35
.	.	.	.	.	41.85	1849,	.	.	.	.	42.89
.	.	.	.	.	45.07	1850,	.	.	.	.	54.54

*Estimate of the Cost of the Proposed Canal from Pagan Creek to Blackwater River.*

**EASTERN DIVISION.—Length two miles and sixty-nine chains.**

**1st Level—31 chains long :**

Is located in the bed of old Courthouse creek, which will have to be excavated to a depth of from 1 to 2 feet, to render it navigable at low tide.

2240 cubic yards earth excavation, at 20 cts. per cubic yard,	-	448 00	
Lock No. 1, 6.50 feet lift, at \$ 600 per foot lift,	-	3,900 00	
			<b>4,348 00</b>

**2d Level—61 chains long :**

Will be composed of embankment thrown up on the marsh near the hill side of the valley of old Courthouse creek.

28,730 cub. yds. earth excavation and embankment, at 10 cts. per cubic yd.	-	2,873 00	
Lock No. 2, 7.75 feet lift, at \$ 500 per foot lift,	-	3,875 00	
			<b>6,748 00</b>

**3d Level—5 chains long :**

Is near Wilson's mill, situated between locks Nos. 2 and 3.

4040 cubic yds. earth excavation and embankment, at 10 cts. per cubic yard,	-	404 00	
Road bridge over tail of lock,	-	20 00	
Lock No. 3, 7.75 feet lift, at \$ 500 per foot lift,	-	3,875 00	
			<b>4,299 00</b>

**4th Level—1 mile and 8 chains long :**

The reflux water in Wilson's mill pond, as far as its head, will be used for the navigation of this level, and a towing path to be constructed around its sinuosities: a short canal from the head of the pond in the valley of the creek carries it to its termination.

Grubbing and clearing,	-	450 00	
37,860 cubic yds. earth excavation and embankment, at 10 cts. per cubic yard,	-	3,786 00	
Lock No. 4, 8.75 feet lift, at \$ 500 per foot lift,	-	4,375 00	
			<b>8,611 00</b>

**5th Level—10 chains long :**

Is in the valley of the creek near Daniel's mill, and connects locks Nos. 4 and 5.

3060 cubic yds. earth excavation and embankment, at 10 cts. per cub. yard,	-	306 00	
Road bridge over tail of lock,	-	20 00	
Lock No. 5, 8.75 feet lift, at \$ 500 per foot lift,	-	4,375 00	
			<b>4,701 00</b>

**6th Level—13 chains long :**

Commences at Daniel's mill dam, and terminates at the head of his pond, which will be used for the navigation: a towing path similar to the one proposed on Wilson's pond to be constructed on its banks.

Grubbing and clearing,	-	-	65 00	
7300 cub. yds. earth excavation and embankment, at				
10 cts. per cub. yard,	-	-	730 00	
Lock No. 6, 7 feet lift, at \$500 per foot lift,	-	-	3,500 00	
				4,295 00

7th Level—14 chains long:

Is located in the valley of a branch which empties into Daniel's mill pond, and will be easily constructed.

Grubbing and clearing,	-	-	70 00	
4745 cub. yds. earth excavation and embankment, at				
10 cts. per cub. yd.	-	-	474 50	
Lock No. 7, 7 feet lift,	-	-	3,500 00	
				4,044 50

8th Level—7 chains long:

Is similar in all respects to No. 7.

Grubbing and clearing,	-	-	35 00	
2100 cub. yds. earth excavation and embankment, at				
10 cts. per cubic yard,	-	-	210 00	
Lock No. 8, 8 feet lift, at \$500 per foot lift,	-	-	4,000 00	
				4,245 00
				<u>\$41,291 51</u>

MIDDLE DIVISION—Length four miles and seventy-three chains.

This the summit level commences near T. P. Ripley's house and extends as far as Jno. E. Thomas' mill: the first 2½ miles consist principally of deep earth cutting (maximum 34½ feet) in crossing the pocoson, which separates the waters of James and Blackwater rivers at this point: the remainder of the level will be slack water navigation in Thomas' mill pond, which can be obtained by elevating it 13 feet above its present surface.

Grubbing and clearing,	-	-	2,800 00	
569,100 cub. yds. earth excavation, at 25 cts. per cubic yard,	-	-	142,275 00	
31,700 cub. yds. embankment, at 15 cts. per cub. yd.			4,755 00	
53,800 " earth excavation and embankment, at				
10 cts. per cub. yd.	-	-	5,380 00	
3 road bridges,	-	-	350 00	
				155,560 00

Feeder—Length 5 miles 15 chains:

Commences at a point near Gray's mill, and follows the left bank of the valley of Mill swamp run, for three and one quarter miles; then crosses the ridge lying between Mill swamp and Jones' swamp; and after crossing the latter, pursues a route on its left side, until it reaches within a short distance of Thomas' mill, and then connects with the mill pond at that point.

Grubbing and clearing,	-	-	1,575 00	
75,916 cub. yds. earth excavation and embankment,				
at 10 cts. per cub. yd.	-	-	7,521 60	
97,500 cub. yds. embankment, at 15 cts. per cub. yd.			4,125 00	
127,100 " " at 20 cts. " "			25,420 00	
9 culverts,	-	-	1,000 00	
4 road bridges,	-	-	100 00	
Feeding pipes,	-	-	600 00	
Lock 6 feet lift at dam, at \$500 per foot lift,	-	-	3,000 00	
				43,341 60
				<u>\$198,901 11</u>

**WESTERN DIVISION—Length five miles thirty-eight chains.****10th Level—5 chains long :**

Is near Thomas's mill and connects locks Nos. 9 and 10.

3604 cub. yds. earth excavation and embankment, at 10 cts. per cubic yard,	-	-	360 40	
Road bridge over tail of lock,	-	-	20 00	
Lock No. 9, 8 feet lift, at \$ 500 per foot lift,	-	-	4,000 00	
Lock No. 10, 8 " " " "	-	-	4,000 00	
			<hr/>	8,380 40

**11th Level—5 chains long :**

Is similar to the 10th, and connects locks Nos. 10 and 11.

2224 cub. yds. earth excavation and embankment, at 10 cts. per cubic yard,	-	-	222 40	
Lock No. 11, 8 feet lift, at \$ 500 per foot lift,	-	-	4,000 00	
			<hr/>	4,222 40

**12th Level—2 miles 12 chains long :**

Is located principally in Rattlesnake swamp, which is covered with a growth of very heavy timber, consisting of cypress, elm, &c.: the excavation is not deep, but will be attended with some difficulty on account of the abundance of cypress roots, &c.

Grubbing and clearing,	-	-	800 00	
34,100 cub. yds. earth excavation and embankment, at 20 cts. per cubic yard,	-	-	6,820 00	
1 road bridge,	-	-	50 00	
1 culvert,	-	-	250 00	
Lock No. 12, 5 feet lift, at \$ 500 per foot lift,	-	-	2,500 00	
			<hr/>	10,420 00

**13th Level—1 mile and 42 chains long :**

Is also located principally in Rattlesnake swamp, which is of the same character as that described in No. 12.

Grubbing and clearing,	-	-	615 00	
29,500 cub. yds. earth excavation and embankment, at 15 cts. per cubic yard,	-	-	4,425 00	
1 culvert,	-	-	250 00	
Lock No. 13, 5 feet lift, at \$ 500 per foot lift,	-	-	2,500 00	
			<hr/>	7,790 00

**14th Level—1 mile and 54 chains long :**

Is located in Rattlesnake swamp, and terminates at Blackwater river, the western end of the proposed canal: the character of the soil, &c. is similar to the description given in No. 12.

Grubbing and clearing,	-	-	670 00	
24,280 cub. yds. earth excavation and embankment, at 20 cts. per cubic yard,	-	-	4,856 00	
1 culvert,	-	-	250 00	
1 road bridge,	-	-	50 00	
Lock No. 14, 6 feet lift, at \$ 600 per foot lift,	-	-	3,600 00	
			<hr/>	9,426 00
				<hr/>
				40,238 80
				<hr/>
				280,431 90
Add for engineering, &c.	-	-	-	19,568 10
				<hr/>
Total estimated cost,	-	-	-	\$ 300,000 00
				<hr/>

## REPORT ON THE MAP OF VIRGINIA.

YANCEY'S MILLS, Nov. 22, 1861.

*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

I have the honor to report that during the present year all the locations, surveys and county maps that could be obtained have been reduced to the scale of the large state map, (five miles to one inch,) and the errors, arising from variations of the compass and the curvature of the earth, corrected as far as practicable. The Alexandria and Orange railroad and Manassa's gap railroad, very lately located, are among the surveys added: the map of the Baltimore and Ohio railroad line, embracing a considerable portion of the northwest, has just been received, and will materially improve that section of the map. The plans of several works now in progress have not yet reached the office: among them are the Virginia and Tennessee railroad and the Southside railroad location.

One of the most valuable acquisitions is the coast survey, which we have been politely allowed to take a copy of at Washington, by the department, so far as it has progressed in Virginia. This plan will form an important basis for the rectification of other surveys, and supplies a great deficiency in the old map, where, as will be noticed, the seaboard was excessively inaccurate.

All that could be done with the present data in our possession has been done. It being impossible to correct the old map, even if the copper plates could be recovered, it has been deemed indispensable to prepare an entirely new work. Accordingly, nine new sheets, of the size of those which compose the old map, have been prepared and fixed on as many dry, carefully made drawing boards of sound mahogany, so that they may be safely preserved. On these sheets the necessary lines of longitude and latitude have been laid, according to Flamsteed's projection, and such points located about which no doubt exists.

Unfortunately, however, much difficulty is here experienced. Few of the surveys or locations agree; and the same point, in many cases, is fixed by several surveys in as many different positions, varying, not unfrequently, as much as ten or fifteen miles—as for example, the mouth of Gauley river, (falls of Kanawha) which is given by four surveys, which all disagree. To reconcile these perplexing discrepancies and discriminate between error and correctness, is impossible without some additional certain light. The only practicable and reliable means, is the addition of some astronomical observations. A number of variable points, such as can be easily recorded and hereafter recognized, will afford a check to the propagation of error from survey to survey, and will confine mistakes at least to narrow limits.

According to your instructions on this subject, I have appointed Capt. A. Talcott, who is provided with proper instruments and who has had large experience in astronomical observations, to obtain some of the most important points in the state. The starting point in the United States being Washington city, whose position is as yet not perfectly settled, he directed his attention to obtaining the best conclusion on the subject, and has given what appears to be the most correct longitude of that place.

The following are the points the position of which he has, so far, furnished to the office :

				Latitude.	Longitude.
Washington City,	-	-	-	38° 53' 20''	77° 0' 0''
Richmond,	-	-	-	37 32 17	77 25 22.5
Winchester,	-	-	-	39 11 14	78 8 46.5
Harrisonburg,	-	-	-	38 26 39	78 49 39
Amelia C. H.,	} On the Danville railroad,	-	-	37 20 41	
Burkesville,				37 11 4	
Grubhill Church,				37 28 48	

It is, however, farther west that points are most needed. Staunton, the top of the Warm springs mountain, the White Sulphur spring, Covington, the mouth of Gauley, of the Kanawha, Parkersburg, Weston, Abingdon, &c. In one word, such points as will rectify errors in a whole extent of country but imperfectly surveyed as yet.

In order to avoid the recurrence of the difficulty now experienced with the old map—that of not being able to make use of correct parts, seeing the impossibility (for want of proper records) of discriminating between them, at this day, and those features which have been introduced by mere guess—I have adopted the plan I had once the honor to suggest to your board. On the nine sheets already mentioned, I purpose laying down only what is known to be undoubtedly correct, and to continue to do so from time to time, the sheets being carefully preserved. Thus there will be a perfect reliance hereafter on this part of the work, and a renewal of the same uncertainty and expense will be avoided in future.

As regards the reduced surveys, they had better be kept loose as they are, to be laid down on the sheets only when their perfect accuracy has been established. And whenever it shall be the pleasure of the legislature to direct the engraving of a map, with such data as we possess, then, and then only, I would advise the filling up of the skeleton sheets from the less reliable documents. To do it sooner might produce the necessity of erasures and changes which would deface and injure the work. By this means, in the process of time, the map will be gradually improved, and ultimately a correct creditable work will be produced.

The most ungrateful task is the arrangement of the counties. Many of them have never been surveyed, and few, at any rate, are sufficiently correct to be adjusted together. Not only the boundaries of adjacent counties do not coincide, but, in a great many instances,



they differ so widely that no one would recognize them as meant for the same line of division. I was greatly perplexed by this circumstance in preparing my small improvements map; but it was there only a very secondary object; here, however, the matter possesses more importance, and it is desirable that, at any rate, the boundaries located along natural topographical features should be correctly given; in other cases the map prepared for present use might introduce the boundaries with less exactness, as it would appear that a complete survey of all the counties might lead into too much expense.

The reduction of the maps and the drawings have been made by Captain Wm. I. Vaitz, late of the Hungarian service, whose qualifications for this business the board has had ample opportunity to witness.

As regards the improvements map, Captain Anthony Kanalassi, also late of the Hungarian army, who has charge of the operation, has made considerable progress in it, on the scale of ten miles to one inch, (that of the small map,) adopted by the board. This map will be made at once for present use, there not being the same necessity for nice adjustment in this case, and it can be ready for the engraver at any time it may be required.

I would, in conclusion, respectfully suggest that all companies, engineers and surveyors should be invited to forward copies of their surveys, if they have not yet done so. Many documents of this kind are still wanting.

Very respectfully submitted.

C. CROZET,  
*Topographical Engineer.*

## BRIDGE ACROSS NEW RIVER IN GILES COUNTY.

*To the President and Directors Board P. Works.*

GENTLEMEN,

In obedience to a resolution of your board, and in accordance with the act of assembly of the 20th March 1851, amendatory to the act of assembly of March 19th, 1850, providing for the construction of a bridge across New river in Giles county, I would beg leave to report as follows :

I proceeded to the county of Giles, collected the owners of Chapman & Snidow's ferry together, and found that they were obstinate and unreasonable. They ask nine thousand dollars for the privilege of building a bridge at that point and the relinquishment of the ferry.

I made them an offer of three thousand dollars, and the free use of the bridge when finished, as long as it might stand, to them and their heirs and assigns, for all ordinary travel ; which was more than any person would offer I had the opinion of in the county of Giles, by about \$1,000—and I consulted with the ablest men of said county.

I tried to ascertain the revenue they derived annually from the ferry ; and from their own books they shew a nett revenue of about \$750 per annum.

I made no contract, and I am of opinion no contract that would be at all reasonable can possibly be made with them.

I beg leave to make this further report, though not directed to do so by your honorable body, to wit :

Having examined the act of assembly of the 20th March 1851, and finding that if the Board of public works are unable to agree with the owners of said ferry, " they shall report all the facts of the case to the legislature at its next session, who may thereupon consider the propriety of authorizing the construction of a bridge at some other point" on New river, I accordingly, with Mr. Henly Chapman and Mr. Dowthet, made further investigations, and am satisfied that the road and a bridge across Walker's creek to intersect the present turnpike, which will be a nearer, and as good if not a better road than the present, can all be constructed for about two thousand two hundred dollars ; and no damage, I am told, will be asked by the owners through whose lands it will pass, except one man, through whose farm it will pass about a distance of one or two hundred yards, which I think, instead of damaging it, will enhance its value.

I also examined the crossing of the river where the bridge is proposed to be built, and am of opinion that it is equally as good as Chapman & Snidow's ferry. In fact, two places can be had : one where the water is smooth on its surface and not so wide : the other is shallow, spreading even and clear across the stream, with a small island near its centre, covered with loose rocks. The last, in my judgment, is preferable.

The bridge at Chapman & Snidow's ferry, and the two above, especially the upper one, will, I am of opinion, cost nearly the same.

The damage that Chapman & Snidow and the heirs, &c. ask, is	-	-	-	9,000
The whole expense of the Walker's creek bridge and the road to make, say	-	-	-	2,200
Leaves a balance of	-	-	-	<u>\$ 6,800</u>

Too much public money to throw away.

Respectfully, your ob't serv't,

E. G. HARMAN.

## V. PLANK ROADS.

## BOYDTON AND PETERSBURG PLANK ROAD.

*First Annual Meeting of the Boydton and Petersburg Plank Road Company.*

At the annual meeting of the stockholders of the Boydton and Petersburg plankroad company, held in Boydton on Thursday, the 2d of October 1851, the meeting was organized by the appointment of Wm. Townes, Esq. chairman, and Robt. S. Feild acting as clerk.

There being present, in person and by proxy, a majority of the stockholders, they proceeded to business.

The president's report was presented and read, with the accompanying documents therein referred to, which were, on motion, received and ordered to be recorded and printed.

On motion, an election of president and two directors was held, which resulted in the unanimous choice of R. W. Feild, Esq. as president of this company, and Wm. Townes, Esq. and Dr. Wm. B. Price as directors.

## PRESIDENT'S REPORT.

**BRUNSWICK, October 2, 1851.**

*To the Stockholders of the B. and P. P. R. Co.*

**GENTLEMEN,**

It now becomes my duty as president of the Boydton and Petersburg plank road company, to report to this meeting the progress as well as the present condition of the work which it is our province to supervise.

Immediately after the adjournment of the meeting of the company at which it was organized, the board of directors proceeded to elect engineers. C. O. Sanford, Esq. was appointed chief engineer, at a salary of \$ 1,500 per annum, and Edwin A. Blanch and William B. Pryor were employed as his assistants, at the annual salary of \$ 700 and board, for each. These gentlemen having been so directed, made a survey of the whole route, with the view of locating the road as speedily as possible.

The board at the same time advertised in the counties of Brunswick and Mecklenburg, and in the city of Petersburg, the letting of the work. At the letting in Petersburg a number of

offered; and after giving them, separately, due and full consideration, they determined to accept the proposal of F. & S. Pratt & Co. They contracted to do the whole work, exclusive of toll-houses and gates, for the sum of \$ 1,933 38 per mile. A copy of the contract is herewith submitted.

I regret to have to state that there was a misunderstanding between the engineer and the contractors with regard to the amount of bridging upon the line, which for a time caused the contractors to refuse to sign the contract. But the board feeling desirous of doing justice when there was some cause to suspect misapprehension on the part of the contractors, determined to allow the contractors \$3 per foot for all bridging over 1200 feet—whereupon they promptly signed the contract, with security deemed sufficient by the board. This fact caused some delay in the progress of the work.

The question being frequently asked, Why does the work go on so slowly? I now deem it my duty to state some of the causes which, in my opinion, retard its progress. First—The company was not organized in time to let the contract before the 1st of January, after which time it was difficult for the contractors to procure laborers. Second—It was not until March that the right of way was allowed by the county court of Dinwiddie; until which time the board feared they would be under the necessity of taking an independent route. Third—The contractors, although to all appearance making the most strenuous efforts to procure saw mills, found it impossible to get them in place as early as they anticipated.

In addition to the above reasons, I would also remind the meeting of another cause of the slow progress of the work. When a contractor undertakes so large a work, (having a variety of agencies to fill with suitable men,) he must expect great trouble before he can get fairly under way. He must remove some of them, for various disqualifications, and often finds great difficulty in procuring the services of such as will discharge their duties satisfactorily.

Again, I would remark that much is done toward the execution of any work, in preparing and fixing to execute it, and time is required to do this. Now, the erection of seven saw mills is no small item in the labor to be bestowed upon this work.

The contractors, in order to avoid the inconvenience of employing so many agents, (I am happy to inform this meeting,) have contracted with a company who have had great experience in the construction of plank roads, to grade and lay the whole road from Petersburg to Boynton. From this company I believe we have nothing to fear, and I hope hereafter there will be no cause for complaint of tardiness in the work.

The contractors are now prepared with seven saw mills, five of which are already in operation, and adequate to the supply of plank to lay at least five miles per month. We have every reason to expect the completion of the road in twelve months. There has been only about three miles of the road laid, and planks sawed for several miles more, and distributed along the road.

A resolution was passed at the meeting of the stockholders, held in

the city of Petersburg the 27th day of November 1850, appointing a committee to apply to the county courts of Dinwiddie and Mecklenburg for an order relinquishing the public market road for the use and benefit of this company, the county court of Brunswick having previously made a similar order. The board found, that whilst the court of Mecklenburg had granted the order without exacting the privilege of county travel, or any restrictions whatever, the court of Dinwiddie refused to make the order desired, but directed a committee to confer with the president and directors of the plank road company preparatory to its final action at the next term of the court. A conference was had with the committee, who referred the subject back to the court, who thereupon granted the road from Nottoway river to the courthouse, upon the terms desired by the company—and the court at a subsequent term, in compliance with a petition of the citizens, relinquished both the public roads from the courthouse to Petersburg. I would now suggest the propriety of granting to the county of Mecklenburg the same privileges as to county travel which the other counties have received in consideration of their grant to us. Liberality and public spirit deserve their reward.

I would remind the meeting that there is upon the books of the company a surplus of individual subscription of 17 shares, which was unavoidably omitted to be sealed by the commissioners, because most of them were conditional subscriptions, which conditions had not been fulfilled in time for the organization of the company. These subscriptions were reported to the Board of public works as absolute, and have since become so by a compliance on the part of the company with the conditions. I would suggest that the stockholders order the sealing of the subscriptions according to law.

The board, at their meeting on the 10th of June 1851, in the city of Petersburg, received a proposition as follows, to wit: "The committee on the part of the common council of the city of Petersburg, appointed to confer with the president and directors of the B. & P. R. Co. in relation to continuing said road from the corporation line near Butterworth's to some paved street in the city, propose that the city of Petersburg shall construct said road within the limits designated, on condition that the P. R. Co. shall keep the portion of said road within the city in good repair as long as that portion of the road without the city is kept up as a plank road. But the understanding is that the agreement, or any agreement entered into, shall be ratified by the common council of Petersburg before it is binding on either party." The board unanimously rejected the proposition, but made the following one to the council in part, to wit: "But the board, duly sensible of the importance of the proposed connection of the plank road with the paved streets of the city, do in turn submit the following proposition: That the company will unite with the city of Petersburg in constructing the proposed extension of the said road, so as to reach the pavement within the said city, and afterwards in keeping the same in proper repair—one-half of the cost of such construction and repairs to be paid by each party. But this agreement on the part of the company is not to be binding until the same shall be ratified by the stockholders in general

offered; and after giving them, separately, due consideration, they determined to accept the proposal of the contractors. They contracted to do the whole work, exclusive of the gates, for the sum of \$ 1,933 33 per mile. A herewith submitted.

I regret to have to state that there was some difference between the engineer and the contractors with reference to bridging upon the line, which for a time caused the contractors to refuse to sign the contract. But the board felt that the necessity when there was some cause to suspect the contractors, determined to allow the contractors to bridge over 1200 feet—wherever necessary. These objections to the contract, with security deemed sufficient, have had undue influence upon the progress of the work.

The question being frequently asked, why does the work progress so slowly? I now deem it my duty to state the reasons. In my opinion, retard its progress. The projectors of this scheme, some of whom were organized in time to let the contract to the contractors, which time it was difficult for the projectors to move forward. Second—It was not until March that the projectors were called into requisition by the county court of Dinwiddie; and the projectors were called into requisition. Third—The contractors, although they made strenuous efforts to procure saw mills, but far the cheapest and in place as early as they anticipated.

In addition to the above reasons, the contractors have no satisfaction wherever they have been. Being a novel work in this country, it is the nature of the thing that they do not understand. Whether it comports with their sense of propriety of this kind whilst it is yet in the hands of those who are now complaining of the delay.

Again, I would remark that the work is not yet finished. Our friends should not permit our interest to be prejudiced by the delay and fair trial. Does any one expect the labor to be bestowed upon the work even the second year? The bed of the river must be improved; the branch roads must be improved; the gearing of our wagons and teams must be improved.

The contractors, in order to secure the full benefits of the improvement, must give a statement of the clerk and treasurer, giving a statement of the assets, &c. of the company.

The contractors are already in the process of laying at least five miles of plank roads, to grade and improve the completion of the about three miles of more, and distribute

A resolution was

Individuals, 1297 shares at \$ 50,	64,850 00
state of Va., 1920 " "	96,000 00
<b>Making</b>	<b>\$ 160,850 00</b>



	-	-	-	8,759 25
	-	-	-	9,988 00
	-	-	-	<u>\$ 18,747 25</u>
	-	-	-	160,850 00
	-	-	-	18,747 25
	-	-	-	<u>142,102 75</u>
holders,	-	-	-	142,102 75
bank,	-	-	6,195 00	
hands,	-	-	2 29	6,197 29
	-	-	-	<u>\$ 148,300 04</u>
nt of assets,	-	-	-	

the election of engineers, being under the impression  
 should be let to several contractors distributed along  
 selected two assistant engineers as absolutely necessary  
 the whole line. But the whole work having been taken  
 over, making the work more concentrated, the board see  
 ity for the employment of but one hereafter.

any have been deprived, by resignation, of the services of  
 directors, J. J. Daly and Alfred Boyd, Esqrs.: the vacancy  
 by the resignation of the former was filled by the board  
 appointment of Col. Wm. Baskerville. The vacancy by the  
 of the latter, as well as the appointment of the 6th direc-  
 ed by the by-laws, remains to be filled by this meeting.

ceased in being able to say, that the duties of the officers and  
 the company have been diligently and faithfully performed.  
 conclusion I, beg leave to remark, that notwithstanding the want  
 evinced by others in the success of this improvement, my con-  
 in it is not only unabated but increased.

of which is most respectfully submitted.

RICHARD W. FEILD, *Pres.*



meeting assembled  
fication, was at  
first day of Ju  
ratification of 18

It affords me  
been settled with  
terms much more  
total amount of

Objections to  
road is too narrow  
track; that it is  
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The following report upon the  
Petersburg plank road.

The road, it was found entirely  
not exceeding three degrees,  
100 feet of distance, being less  
roads, and that the only expense  
cuts and comparatively high  
to keep the grade of the road  
travel might not be interrupted.  
to this general rule, if it shall  
company will not justify the erection  
roads that occur in that river.

These roads—those that have been used  
plank is chiefly of hemlock, a soft,  
which is not considered durable when  
satisfied that our sap pine and red  
well in respect to decay, and will  
This is the most important point, as it has  
as have been in operation a sufficient  
the planking is worn out before it has

"Salina road," the oldest in New York,  
much on account of decay, as in conse-  
worn nearly through in a little more than

successful road, paying good dividends, and  
beech and other hard, durable and ex-  
purchased for renewals.

I should have preferred for the Boynton  
could be white oak, post oak or heart pine;  
was found, that while a sufficiency of these  
the road, they were situated along the  
banks, and the hauling over the common earth  
purchase, &c. would swell the expense of  
the capital of the company.

In circumstances, it was proposed and adopted to  
use of original growth pines, and several kinds of  
white and post oak, and by this means, to be enabled  
than the prescribed limits, and in future to pro-  
duce of lumber; and having the plank road to trans-  
port, as it gradually decays or wears out, may be  
in a perfect and substantial manner.

The width of the road way is twenty-six feet, inclusive of ditches ; of the plank way, the usual and most approved width of eight feet: this width has been found to answer every purpose, from Canada to Georgia, after trying greater widths of ten, twelve, and even sixteen feet.

There are several objections to an extra width, among which may be mentioned the additional cost, and, an important fact, that as soon as the road wears in the centre, it settles, and forms a trough to hold water, whereas one of the great objects is to obtain as thorough a drainage as possible.

It is true that this width has been much complained of in all parts of the country where four or six horse teams are generally used, for, from the manner of gearing, and until channels are worn by the wheels, it requires some care in driving to keep the wagons on the plank way ; but as soon as the road shall have been finished, two horses will be sufficient to each wagon, and by properly arranging the tongues of the wagons, this difficulty will cease.

Another objection frequently urged, is the loose earth of which the road bed is necessarily formed causing inconvenience in turning out, especially during the rainy seasons, but in a reasonable time the earth settles, and becomes firm ; and as one wagon in turning out seldom follows in the tracks of any other, no deep ruts are made, and the inconvenience is temporary.

Many persons suppose that a plank road should be as smooth and even as a house floor ; to effect this would cause an unnecessary expense in sawing the plank to an exactly even thickness, and the road would not in reality be as good, because the slight irregularities in the thickness of the planks afford a better foothold for horses.

It was understood that eight saw mills should be placed at nearly equal distances on the eastern half of the road, and when this portion was finished, to remove the mills to the western half. These mills have not arrived as soon as expected, and those that have been erected have had an unusual number of accidents. The defects are in a great measure corrected, and no doubt they will run more steadily in future.

The following tabular statement shews the number of mills, their position, the amount of lumber sawed, &c. :

No. of Mills.	Where situated.	Distance from Petersburg.	When erected. 1851.	Quantity of plank sawed, in board measure.
No. 1,	At New Inn,	4 miles,	25th September.	
" 2,	" Boiseaux's,	5½ "	1st July,	260,000
" 3,	" Dabney's,	12 "	15th June,	330,000
" 4,	" Cross Roads,	18½ "	15th May,	390,000
" 5,	" Buckskin Creek,	23 "	Machinery arriving.	
" 6,	" Stith's,	38 "	30th September.	
Total quantity sawed,				980,000

This amount of plank will lay about six miles of the road, and about one-half is now laid.

It is hoped that the whole eight mills will be in operation during the next two months; and with this preparation for sawing, I believe the work can be completed during next year, which is the time allowed by the contract, and I base my belief on the following statements:

The plank required for the whole road is about 12,000,000 feet, board measure, of which about 1,000,000 has been sawed, leaving 11,000,000 yet to saw; then assuming fourteen months as the average future time, 4,500 feet per day to each mill, twenty-three working days to each month, and eight mills, it will be found that the quantity of plank cut would be upwards of 11,000,000 feet.

The road can easily be graded and laid as fast as the plank can be cut, especially as the Messrs. Pratt have subcontracted the grading, bridging and laying of the road to a company of enterprising contractors, who have just brought on the principal part of their force, capable of laying one mile per week; and from the vigorous commencement they have made, and the satisfactory manner in which the short distance of road laid by them is executed, I feel quite sure they will perform their part.

The amount of work done by the contractors, in cutting down trees, sawing, laying road, &c. amounts to about \$10,000.

From what has been said, I think the board will agree with me that there is now a prospect of a speedy prosecution of the work. The preparation of the timber is the principal item to facilitate its construction, and fortunately steam power is not so fluctuating as the force in general use upon public works: when the mills are once erected, they must be constantly used to make them profitable, and I still hope that the board may not be disappointed in their expectation of seeing the road finished by the time they designed, and that they may feel the proud satisfaction of reflecting that a road which will ultimately benefit the country through which it passes, as much as any work in the state, has been carried through in spite of unusual difficulties.

Respectfully submitted.

C. O. SANFORD, *Chief Engineer.*

*Petersburg, Sept. 30, 1851.*

The president and directors of the Boynton and Petersburg plank road company respectfully submit to the Board of public works the following report, in pursuance of the 2d section of chapter 72 of the Code of Virginia:

The whole amount of stock subscribed for,	-	<u>\$160,850 00</u>
Of which the state subscribed for	-	96,000 00
And individuals for	-	64,850 00
		<u>\$160,850 00</u>

scription by individuals to  
it was recently directed by  
the largest subscribers, so  
sidered \$160,000, as required

the 1st of Oc-

- - \$18,747 25

- 9,988 00

- 8,759 25

\$18,747 25

construction of the work to the 1st Octo-

- - 118 00

for engineer's and assistants'  
hands, for preliminary survey

rs, and for engineer's and assis-

board of hands, to ascertain land

ent for that purpose, - 3,834 39

work, - - 7,500 00

treasurer's salaries, advertising and  
company, and directors' mileage, 1,049 05

\$12,501 44

received as above, - - 18,747 25

disbursed as above, - - 12,501 44

Cash on hand, - - \$6,245 81

### *Property of the Company.*

paid for by the state, - 86,012 00

Do. by individuals, - 55,240 75

141,252 75

Cash on hand, - - 6,245 81

\$147,498 56

### *Officers of the Company and their Salaries.*

Richard W. Feild, President—salary \$750; F. F. Jones, William Baskerville, D. M. Bernard, state directors—no salary, but 12½ cents per mile for traveling; Wm. W. Talley, Alfred Boyd, directors on the part of the stockholders—they have been substituted by the ap-

pointment of Wm. Townes and Wm. B. Price—no salary, but 12½ cents per mile for traveling; Robert T. Field, clerk and treasurer—salary \$ 300; C. O. Sanford, chief engineer—salary \$1500; E. A. Blanch, Wm. H. Pryor, assistant engineers—salaries \$ 700 each and board.

The company has received no tolls, rents or other profits, the work not being yet completed.

No map of the improvement has been prepared, nor can one be made until the work is finished, as we are constantly finding it necessary to vary the locations. A map of the location will be prepared in a few weeks and forwarded to you.

We send herewith an alphabetical list of the stockholders, shewing the amount due by each.

We also send a printed copy of the president's and engineer's reports to the annual meeting of the stockholders on the 2d of October 1851, and the proceedings of the stockholders at that meeting. A small variance will be discovered between the amount then stated to be on hand and the sum now reported. It results from the fact that of the amount in the hands of C. O. Sanford, the engineer, \$311 02 had not been expended, and \$262 50 have since been paid to the president and treasurer on account of their salaries from 1st July to 1st October 1851. Corrected in pursuance of this explanation, the statement is as follows:

Amount of money on hand, according to printed report,	6,197 29
Add the amount in engineer's hands not expended,	311 02
	<hr/>
	6,508 31
Deduct payment to president and treasurer,	- 262 50
	<hr/>
Balance on hand as now reported,	- \$ 6,245 81

We report, as the general condition of the work, that the whole line of the improvement is under contract and will probably be finished within the year 1852. Six or seven miles of the road have been completed, but being in detached parcels of less than five miles, they have not been received by the county courts as required by the act of assembly. We hope that the whole work will be finished at a cost not exceeding the estimate, so as to fall within the means of the company.

By order of the board this 29th day of October 1851.

RICH'D W. FEILD, *Pres't.*

ROB. S. FEILD, *Clerk.*

## FREDERICKSBURG AND VALLEY PLANK ROAD.

*To the Board of P. Works of Virginia.*

The undersigned, as president of the Fredericksburg and Valley plank road company, respectfully reports that  $31\frac{6}{10}$  miles of said road, commencing at Fredericksburg, and terminating in the county of Orange within seven miles of Orange C. H., have been located, and are in process of construction. It has not been deemed advisable to continue the survey to a more extended point, inasmuch as it was not certain that the amount of stock subscribed would justify the putting under contract of a longer line of road. The work upon the road was commenced by the contractors on the 15th day of October 1850, and has been regularly prosecuted since that period. It has been found necessary to let the said line of  $31\frac{6}{10}$  miles in various sections to different contractors, and the work upon the line has been prosecuted by the latter at detached points. Nearly two-thirds of this line has been graded, and is ready for the planking, and about six miles have been planked; if the winter proves favorable, the entire  $31\frac{6}{10}$  miles will be completed during the ensuing spring. The average cost per mile of the above line as estimated by the engineer, will be \$2,737 31, which estimate includes the current salaries of the officers of the company and every other expense, exclusive of land damages.

This estimate is deemed higher than the result will shew. By an act of the last legislature the capital stock of the company was increased from \$100,000 to \$150,000, with a subscription on the part of the state of  $\frac{1}{3}$  of the increment upon the usual terms. No additional private subscription has as yet been obtained, though there is reason to believe that the amount necessary to obtain this increment of stock, will be obtained in order that the road may be constructed at least to Liberty mills in the county of Orange, at which point it will effect a junction with the macadamized road leading from Page county to Gordonsville.

A map of the road will be prepared in a short time by the engineer for your board. His duties upon the line have been for some time past engrossing, and have prevented his preparing it in time for this report.

Accompanying this you have the treasurer's statement of the fiscal operations and condition of the company for the year ending September 30th, 1851, as also a list of the stockholders, and a list of the officers, together with their respective salaries.

All of which is respectfully submitted.

ROBT. B. MARYE,  
*President.*

*Fredericksburg, Nov. 5, 1851.*

[ Doc. No. 18.]

of the *Fredericksburg and Valley Plank Road Company* for  
the year ending 30th September 1851.

Total stock \$100,000:			
of the individuals 800 shares, at \$ 50 per share,	-	-	40,000 00
of the commonwealth 1200 shares, at \$ 50 per share,	-	-	60,000 00
of the commonwealth's subscription remaining unpaid on the 30th September 1851,	-	48,000 00	
of the individual subscription remaining unpaid on the 30th September 1851,	-	25,731 00	
Total expended in construction, viz:			
to the contractors,	-	15,901 48	
for salaries of officers, including engineer corps,	-	3,195 55	
for miscellaneous expenses,	-	2,807 30	
for the expense of directors,	-	474 00	
for insurance,	-	861 76	
Cash in the treasury on 30th September 1851,	-	3,028 91	
		<u>\$100,000 00</u>	<u>100,000 00</u>
Statement of receipts and disbursements within the year, viz:			
received of individuals,	-	-	14,269 00
received of Board of public works,	-	-	12,000 00
Total received for the same period, viz:			
to the contractors,	-	15,901 48	
for salaries of officers, including engineer corps,	-	3,195 55	
for miscellaneous expenses,	-	2,807 30	
for the expense of directors,	-	474 00	
for insurance and damage,	-	861 76	
Cash in the treasury 30th September 1851	-	3,028 91	
		<u>\$ 26,269 00</u>	<u>26,269 00</u>

By order.

JAMES McGUIRE, Sec. & Treas.

*List of Officers, with their respective Salaries, in the Service of the Fredericksburg and Valley Plank Road Company, at different periods during the year ending on the 30th September 1851.*

R. B. Marye, president,	-	-	-	-	-	\$ 500 00
J. H. Sheamer, engineer,	-	-	-	-	-	1200 00
W. T. Cochran, 1st assistant engineer, per diem,	-	-	-	-	-	2 00
T. F. O'Brien, 2d " " "	-	-	-	-	-	1 75
H. G. Smith, rodman,	-	-	-	-	-	1 25
A. McGee, " " "	-	-	-	-	-	1 00
James McGuire, secretary and treasurer,	-	-	-	-	-	250 00
Axemen:						
Slave Reuben,	-	-	-	-	-	90 00
Slave Willis,	-	-	-	-	-	95 00

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*List of Officers now in the Service of said Company.*

R. B. Marye, president,	-	-	-	-	-	\$ 700 00
W. T. Cochran, engineer, per month,	-	-	-	-	-	100 00
Jas. G. Reed, assistant engineer, per diem,	-	-	-	-	-	1 64½
A. McGee, rodman,	-	-	-	-	-	100 00
James McGuire, secretary and treasurer,	-	-	-	-	-	250 00
Axeman:						
Servant Willis,	-	-	-	-	-	95 00

**JAMES MCGUIRE,**  
Sec. & Treas. F. & V. P. R. Co.

Fredericksburg, Sept. 5, 1851.





## VII. TELEGRAPH COMPANIES.

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### VIRGINIA TELEGRAPH COMPANY.

NORFOLK, VA. Oct. 27, 1851.

*To the Board of P. Works of Virginia.*

GENTLEMEN,

The annexed statement shews the condition of the monetary affairs of the Virginia telegraph company on the 30th September 1851. The arrangements of the company for transmitting messages from Norfolk and Portsmouth continue as mentioned in the last annual report. At the time that report was made it was supposed the company would be compelled to mast the wires across the river at Reid's ferry; but on a proper examination the marsh upon one side of the river proved to be too soft and spongy to sustain a mast of sufficient size and height, and an improved gutta percha wire was laid down, which has not given so much trouble to keep it in order.

The office in Suffolk has been suspended since the railroad was completed to that place, because the receipts were not sufficient to pay an operator to keep it open. The company are compelled to keep an operator at the office in Smithfield, the better to enable them to keep the line in that vicinity in order, although at considerable expense.

The salary of the operator in Portsmouth is \$ 600, and in Petersburg \$ 500 per annum, and the pay of the message boys varies from \$1 50 to \$ 2 per week.

The business of the line appears to be gradually increasing, and although the expenses for the next year will probably be increased by some additional pay to the operators and heavy repairs to the wires and poles, (the wires having been seriously injured in many places by the lightning and other casualties,) the board of directors still indulge the hope, that by good management the line will sustain itself, and ultimately, perhaps, yield a small dividend to the stockholders, a list of whom is enclosed herewith.

Respectfully submitted.

WM. J. HARDY,  
*Pres. & Treas.*  
J. MUNDEN SMITH,  
JAS. H. JOHNSTON  
RICH'D P  
JOHN T

[ Doc. No. 18.]

*nt of the Receipts and Expenditures of the Virginia Telegraph Company,  
for and within the year ending the 30th of Sept. 1851.*

ed for messages transmitted from the offices at Norfolk and Portsmouth,	2,056 79
"                    "                    the office in Petersburg,	2,752 49
<b>Total amount of receipts,</b>	<b>4,809 28</b>
trator's salary and other expenses paid at Norfolk and Portsmouth,	2,457 42
"                    "                    paid at Petersburg,	1,565 51
	<b>4,023 93</b>
profit of this year's business,	766 35
which balance became due by the company, per last annual report,	345 08
<b>Balance in the hands of the treasurer,</b>	<b>\$ 431 20</b>

WM. J. HARDY, Treas.

Norfolk, Va., 30th Sept. 1851.

## WESTERN TELEGRAPH COMPANY.

OFFICE WESTERN TEL. Co.

*Washington, Oct. 31st, 1851.*

*To the Board of Public Works  
of the State of Virginia.*

GENTLEMEN,

Being president and lessee of the Western telegraph company, whose line passes through a portion of Virginia, I presume it may be considered my duty to give the information relative to the stock and income of that company required by act of your general assembly.

No change has been made in the stock of the company since last report, nor has any addition been made to the structure.

The line has been under lease since the first of November 1850, at three and one-half per centum per annum upon the stock; but although it is not possible as yet to ascertain precisely what has been the nett income for the last year, enough is known to shew that it has not amounted to the rent.

Very respectfully,

Your ob't serv't,

AMOS KENDALL.

[ Doc. No. 16.]

WASHINGTON AND NEW ORLEANS TELEGRAPH  
COMPANY.

WASHINGTON, October 4, 1851.

J. BROWN, Esq. *Second Auditor*  
*of the Commonwealth of Virginia, Richmond.*

SIR,

In compliance with the act of assembly of the common-  
wealth of Virginia passed on the 21st of March 1848, I have the ho-  
nor to inform you the amount of stock owned in the state of Virginia and  
holders of the Washington and New Orleans telegraph for the  
year ending 30th September last, remains unchanged. I transmit a  
copy of the annual report of the stockholders, held at the city of  
Richmond on 2d July last, at which time a dividend of 3 per cent.  
was paid out of nett receipts for the year ending 1st June 1850;  
I leave to refer you to statements of receipts and expenditures  
annexed, as shewing the operation and condition of the tra-  
de of said company.  
There has been no modification of the rules and regulations, of  
which printed copies have been sent to you with my last report.

With very great respect,

I am your ob't serv't,

AMOS KENDALL, Tr.  
*Washington and New Orleans Tel. Co.*

*Third Annual Meeting of the Stockholders.*

The third annual meeting of the stockholders of the Washington and New Orleans telegraph company was held at the rooms of the treasurer, in the city of Washington, on Wednesday the second day of July 1851.

Present: Elam Alexander, president; Amos Kendall, Washington; George Wood, Washington; Smith Mowry, Jr., Charleston; R. R. Cuyler, Savannah; Edward G. Hyde, New Orleans; B. B. French, Washington; S. F. B. Morse, Poughkeepsie, New York; W. S. King, Charleston—representing their own stock, and proxies for other stockholders.

A large majority of the stock was represented in the meeting.

The president submitted the following report, which was read, and on motion, ordered to be printed:

**PRESIDENT'S REPORT.**

*To the Stockholders of the  
Washington and N. Orleans Telegraph Co.*

GENTLEMEN,

Your annual meeting has again called you together, and it becomes my duty to lay before you a statement of the transactions of the past year.

At your last meeting a resolution was passed authorizing me to have a second wire put up on the section of our line between Mobile and New Orleans as soon as it could be done on proper terms. On examination of that section, I found the whole of it had to be renewed, the original poles being almost entirely rotten; I therefore determined to include the renewal of the old line and second wire in same contract. I succeeded in making a contract with A. M. Griffin, Esq. to complete the work for \$10,500, adding an additional number of poles, as you will see by copy of contract now before you. This being less than one-third the original cost of that portion of our line I considered a better contract could not be made. \$7,000 of this amount have been paid and \$3,500 remain to be paid.

I was also instructed to negotiate with the Raleigh and Wilmington and the Manchester railroad companies, to see what aid they would give in placing one of our wires on their respective roads. I entered into the negotiation with the Raleigh and Wilmington company, and found their offer of aid so liberal that I at once closed a contract with them and caused a wire to be put up from Petersburg to Wilmington, a distance of two hundred and twenty-one miles. This line is now in successful operation and will add considerably to our business. No arrangement has yet been made with the Manchester company, their road not being sufficiently advanced to authorize the erection of a telegraphic wire. It is, however, in progress of completion, and I have assurances from the president                      may expect all the assistance

from them they may have in their power to grant. You have before you a copy of the contract made with the Wilmington company, and statement of the whole expense of the line from Wilmington to Petersburg.

You will see, by reference to the third resolution of the last meeting, I was authorized to connect with the Magnetic company in some way, to ensure a more rapid transition of messages from the Northern to the Southern cities. This was done by leasing one of their wires on the terms set forth in a contract made with the president of that company, a copy of which is now before you. Offices have been fitted up at New York, Philadelphia and Baltimore, and have been in operation since the latter part of December last, and it remains to be seen how far this arrangement will be beneficial to the interest of this company. My opinion is, the result will be favorable. We have had many interruptions from business during the latter part of the past year, some of which were produced from causes beyond human control, but the greater part by the rapid decay of timber and the imperfect manner in which our line was originally built. These causes will continue to exist, and will prevent our line from ever being as good as the stockholders had a right to expect, from the very high price originally paid for it. From these causes our expenses for repairs have been very heavy, and the delays caused by frequent breaks have had the effect to prevent as great an increase in our receipts as might otherwise have been expected. We have also had to contend with strong competition from two other lines that connect with the same important points with ours, north and south. These lines being new and consequently in good repair, on a route more remote from the storms of the Atlantic coast, have had greatly the advantage over ours in its present decayed condition, and have had the effect to divide the business with us. The extent, however, of our repairs for the past year will justify us in the belief that we will be able to forward business with more promptness in future. This competition has given dissatisfaction to some of the stockholders of this company, which I hope will be satisfactorily explained to them by the owners of Morse's patent.

You will see, by reference to the books and statements of the secretary, that the receipts of the line the past year have been \$113,175 69.

The expense for repairs and working the line, including fitting up offices on the leased line, has been \$82,753 24. Of this amount there have been paid at stations \$37,328 15—refunded for messages missent or behind time, \$1,829 30—deposited to my credit, to pay contractors, \$17,016 56, (a statement of the expenditures and vouchers for them you have before you,)—deposited to the credit of the treasurer, \$46,132 17—to whose report you are referred for a full and satisfactory statement of his expenditures.

You will see, by comparing the receipts of the past year with those of the previous one, notwithstanding the bad condition of our line, there has been an increase of over 16 per cent. Some items of the past year's expenditure need not be expected to be so heavy the coming year. The purchase of new instruments will be very light: the line being well furnished, there will be few comparatively required.

Fitting up offices on leased wire was an item of considerable expense that will not be again incurred. The expense of repairing will continue heavy until our whole line is renewed. Over four hundred miles have been entirely rebuilt the past year, the expense of which is included in the item of repairs, and several sections require immediate attention.

I would recommend that our wire be extended over the Manchester railroad as soon as it is practicable. The distance is only one hundred and sixty miles, and this would give us a continuous second wire from Washington city to Macon, Ga., and the entire distance over railroads except from Petersburg to Washington city. At the commencement of the past year our superintendent, Chas. S. Bulkley, had in progress of invention an improvement on telegraphic instruments, which he wished to use for the better working of our line. He had not procured his letters patent, and I made a contract with him for his services, including the use of his instruments, giving him the right to remove them at the end of the year, if not purchased by the company. The instruments were placed on the line as fast as they could be procured, and we have derived great benefit from their use. He has since procured a patent right, and the instruments, with the privilege of using them, are now offered to the company. There are yet some wanting to make the connection complete, which can soon be made and placed on the line; and I feel confident it would be to your interest to purchase them. Our operators, with one or two exceptions, deserve the thanks of the company. Their labors have been very arduous, having a great portion of their work to do at night, not unfrequently working the whole night. Application has been made to me by the citizens of Selma, Ala., that the location of our line be so changed as to include that town. It is a place of considerable importance, and would, in my opinion, afford sufficient business to justify the removal of our wire, which now leaves them about six miles to the west of our present route. Some portion of that section of our line will soon have to be rebuilt, and I would recommend that the location be so changed as to include that place. The citizens proposed to assist in raising funds to defray the expense, by taking stock in this company. The propriety of increasing the amount of our stock, already so large, is, together with all other matters connected with the interest of this company, respectfully submitted to you for your consideration.

ELAM ALEXANDER, *Pres.*





## VI. BRIDGE COMPANIES.

### FAIRMONT AND PALATINE BRIDGE COMPANY.

*Return of the state of the Fairmont and Palatine Bridge Company for the year ending September 30, 1851.*

Capital stock, \$ 20,000 :		
Subscribed by individuals 320 shares, at \$ 25 each,		8,000 00
Subscribed by the commonwealth 480 shares, at \$ 25 each,		12,000 00
Subscribed by individuals beyond the capital 3 shares, at \$ 25 each,		75 00
Amount of commonwealth's subscription unpaid,	11,100 00	
Amount of individual subscription unpaid,	7,025 00	
Amount of cash on hand,	1,950 00	
	<u>\$ 20,075 00</u>	<u>20,075 00</u>

The company have determined to build a wire suspension bridge. The work was commenced but a short time since, and is now rapidly progressing. The value of the work done upon the abutments, and the materials delivered upon the ground, such as iron, wire, &c. is about \$ 3,000, but as yet no money has been formally paid out, it having been agreed upon that the 1st day of October should be the first pay day.

A transcript from the record.

A. S. HAYDEN, Sec'y.

**NORTH BRANCH BRIDGE COMPANY.*****Report of the President and Directors of the North Branch Bridge Company.***

**To the Stockholders of the North Branch Bridge Company.**

The company was organized on the 22d day of June 1850, and it becomes a duty to lay before the stockholders a report of the proceedings of the board of directors, the progress of the work, the cost of construction, the state of the funds, the prospects of the company, &c.

In the discharge of this duty we shall be as brief as the nature of the case will allow; and while it is feared that this report may not be as full, clear and satisfactory as could be wished, yet it is hoped that the stockholders will have the goodness to make a liberal allowance for the want of experience in business of this kind.

Immediately after the organization of the company, steps were taken by the president and directors to fix upon a site and to make other necessary arrangements to put the work under contract: accordingly, the board met on the 27th day of August 1850, at the place where the bridge was to be constructed; and after some deliberation and an interchange of opinion, it was agreed to leave the matter undetermined until another day, and to procure the services of Mr. Atkinson, an engineer in the employ of the Baltimore and Ohio railroad company, a gentleman eminently qualified to discharge the duties of an engineer and to give other aid and instruction to the board which they so much desired and needed, owing to the want of experience in work of this kind. At the time appointed, which was the 3d day of August 1850, the board assembled, and Mr. Atkinson (whose services had been procured) being in attendance, the site was agreed upon, a plan and specifications recommended by Mr. Atkinson, which were adopted by the board, except the reduction of one pier: a day was fixed upon for letting the work and proposals advertised for previous to the day appointed for letting the work. The board received a communication from George W. Washington, enclosing his resignation, thereby losing the services as president of one who was so well qualified to manage the affairs of the company to advantage. This incumbrance, so much regretted by the board, made it necessary to appoint a successor, which was accordingly done on the 24th day of August 1850, by the board appointing James Allen president *pro tempore*. The board having this 24th day of August 1850, convened for the purpose of putting the work under contract, (it being the day fixed upon for receiving bids and making contracts,) a number of bidders being in attendance; and after having considered all the bids, the contract was awarded to Job Sions and Henry Entler & Co., for the sum of four thousand eight hundred and fifty dollars, which was to be paid in monthly instalments as the work progressed, withholding fifteen per cent. as security for the faithful performance of their contract.

The board now perceiving that it would require all their means to pay for the construction of the bridge, after discharging other incidental expenses that would necessarily occur, and to continue the services of an engineer at the cost of two hundred and fifty dollars per annum would create a debt that the means of the company would not be able to meet—it was therefore agreed by the board, in order to prevent that contingency, to dispense with the services of the engineer, and to give their own personal attention to the work as it progressed, which was accordingly done.

An article of agreement was subsequently entered into by the board and contractors, such an one as the board believed would secure the faithful performance of the contractors in the execution of their work, according to the specifications laid down by the engineer. In this, however, they have had the mortification to be disappointed. A partial omission crept into the article in regard to the filling the abutments, by which an attempt has been made by the contractors to take advantage of, by refusing to do the filling which was supposed by the board to be well understood at the time and fully provided for in the article.

The article and specifications of the engineer and other papers herewith exhibited will, it is firmly believed, induce the stockholders to come to the same conclusion.

The board being well aware that to leave the filling undone until a legal investigation of the matter could be had, would endanger the safety of the bridge, and would result in the total loss, probably, of the whole work, or at least would prevent the use and profits of the bridge for an indefinite period ; and after having notified the contractors, and receiving from them a positive refusal to do the filling, it was considered advisable to have it done, and withhold the amount of the cost until a legal investigation could be had.

The board being determined to have the filling done at the expense of the contractors, they advertised for proposals, to be received on the 13th of August 1851. There being not a quorum on that day, the meeting was adjourned to the 20th day of August 1851. Accordingly, the board met on the day specified, and a number of bidders presented themselves and laid in their bids ; and after due consideration, the contract was awarded to Charles Stickley, for the sum of two hundred and fifty dollars. He has completed the filling—whether agreeable to his contract, is yet to be determined.

The whole work is now completed and in a condition to accommodate the travel, according to the contract with Sions & Entler.

The board wish to call the particular attention of the stockholders to the fact, that owing to the inadequacy of means from the limited amount of stock allowed in the act of incorporation to be taken for the construction of the bridge, the board was compelled, in order to keep within the limits of their means, to omit roofing or weather-boarding, which leaves the superstructure in an exposed condition that will soon cause it to rot down.

The board therefore earnestly recommend to your consideration the propriety of taking immediate steps to remedy this defect. It will be

[ Doc. No. 12.]

the company to do so, as the bridge cannot last many years, it being constructed principally of pine timber.

The treasurer of the company, which accompanies this report, will show the amount received from private stockholders, the amount still due from the same; the amount received from the state's stock and the amount due from the same; the amount paid to engineers and other incidental expenses, &c. Inasmuch as the money was not collected as it was required for the fulfilment of the contract, and as the state stock has not been received in consequence of collections being delayed from individuals, it has been found necessary to resort to temporary loans to enable the company to meet its exigencies.

It is therefore found necessary to call in the whole amount due from private stockholders, and prompt payment is particularly desired, in order that the company may be enabled to meet its liabilities. The board have but little to say in regard to the prospects of the company, as it is reasonable to suppose that the board have but little to say.

As to the Ohio river trade, it is also reasonable, on the one hand, to suppose that from the increasing mining and manufacturing operations in the West, and in the vicinity of Frostburg, and the countless number of operatives employed in them, that there will be an increased demand for the products of the valleys of the South branch and Patterson's creek which must necessarily pass this bridge, and may realize the expectations of the stockholders.

In conclusion, gentlemen, the board is compelled to call your attention to a subject connected with the discharge of their duties and obligations to the company, which they do with a great deal of reluctance. Owing to a particular proceeding of the former treasurer, which it is supposed that gentleman felt it his duty to take, an impression has been produced, and has gone abroad, that the board has been remiss in the discharge of their duties, or that they have not managed the affairs of the company in a manner conducive to their interest. In justification of ourselves, gentlemen, we have not one word to say; but it is our reasonable right to call upon you, and for you to investigate this matter, which we demand of you. If the board deserves to be censured, they are willing to bear the odium: if not, they desire to be relieved from it.

JAMES ALLEN, *President.*

JOHN T. COOKUS,

JOHN CLINE,

HIRAM ALKIRE,

NIMROD FURR,

JONATHAN BARKDALE,

} *Directors.*

A true copy of the minutes.

LEWIS T. DUNN, *Clerk.*

*Account of Moneys received and Moneys paid out by Samuel D. Brady, late  
Treasurer of the North Branch Bridge Company.*

<b>1851.</b>			
<b>Aug. 18,</b>	By this sum received from stockholders,	-	949 10
	By this sum received from Board of public works,	-	1,500 00
			<u>\$2,449 10</u>
<b>Charges:</b>			
<b>1850.</b>			
<b>Nov. 30,</b>	To half quire paper 12 $\frac{1}{2}$ , 1 book 6s.	-	1 12 $\frac{1}{2}$
	To cash paid W. G. Atcason,	-	22 50
	To cash paid for stamp,	-	6 00
<b>1851,</b>	To cash paid Henry Entler,	-	340 00
<b>Jan.</b>	To cash paid Henry Entler,	-	306 85
	To half quire paper,	-	12 $\frac{1}{2}$
<b>Mar. 31,</b>	To cash paid Henry Entler,	-	609 02
			<u>1,285 62</u>
	Cash W. G. Atcason, postage,	-	1 06
			<u>\$1,287 28</u>
<b>In my hands,</b>			1,161 82
			<u>\$2,449 10</u>

**GENTLEMEN,**

Above is a report of my transactions as treasurer of the North branch bridge company, which will shew you that there is in my hands eleven hundred and sixty-one dollars and eighty-two cents, which is ready to be paid over when called for.

Your ob't serv't,

**SAM'L D. BRADY,**  
*Late Treas. of the N. B. B. Co.*

*To the President and Directors  
of the North Branch Bridge Co.*

18th August 1851.

## POTOMAC BRIDGE COMPANY.

OFFICE POTOMAC BRIDGE COMPANY,  
June 19th, 1851.

J. BROWN, JR. *Second Auditor.*

SIR,

Accompanying this communication, I transmit to you the first annual report of the president and directors of the Potomac bridge company, in relation to the condition and progress of the work, together with a report of the state of the finances of the company; all of which has been carefully examined by the said president and board of directors, and believed to be correct.

Should there, however, be discovered any errors or omissions on my part in making up the report, &c. referred to, I will, upon being notified of the same, cheerfully give any information that may be in my power to make.

I am requested by J. P. Schooly, the president of the company, to inform you that since the general meeting of the stockholders, on the 24th May last, that the two abutments have been completed, and that two of the piers have been raised above the height of an ordinary freshet, and the coffer dam in for the raising of the third.

Very respectfully,

SAMUEL C. LUCKETT,  
*Secretary.*

*A Report of the President and Directors of the Potomac Bridge Company for the year ending 24th May 1851.*

We, the president and directors of said company, do respectfully submit to the Board of public works of Virginia the following report of the progress of the work committed to our charge:

According to an estimate made out and exhibited by Charles B. Fisk, engineer of the company, on the 22d day of May 1851, it will be perceived that the contractor, Abraham Bowers, sen., has laid:

1800 perches of masonry in the Maryland and Virginia abutments, wing walls and buttresses, and in the foundation of the toll-house, including the excavations and foundations thereof, also the coffer dams and bailing,	6,300 00
1400 cubic yards of embankments in the rear of the abutments and between the wing walls, - -	196 00
Stone quarried and stone dressed from the quarries near the bridge in Virginia and Maryland, say the same as in the last estimate, also in addition 48 recess stone quarried and delivered, of which 12 are dressed, -	522 00
Cement and lime delivered:	
5308 lbs. of iron delivered, also work not particularly mentioned above, - - - - -	530 00
	<hr/>
	7,548 00
Deduct 20 per cent. retained per centage, - -	1,509 60
	<hr/>
	6,038 40
Deduct previous payments, - - - -	3,900 00
	<hr/>
	<u>\$ 2,138 40</u>

The foregoing embraces all the work done and materials delivered to this date. The work is now steadily progressing with the characteristic energy of the contractor, and but little doubt is entertained as to the completion of the same at the time specified in the contract, which is the 1st December next.

We have employed Charles B. Fisk as engineer, and have agreed to pay him \$ 125 for his services until the work shall have been completed.

We deem it proper to state that the treasurer is required to deposit the funds of the company in the office of discount and deposit of the Bank of the Valley in Virginia at Leesburg, which requirement has thus far been strictly complied with.

You have already been apprised as to whom the contract has been let, but we deem it proper here to state the amount, which is \$37,650 for the erection of the bridge and toll-house complete, with the exception of the whitewashing of the one and the plastering of the other: there has also been a subsequent contract, by which a slight but important change in the construction of the toll-house is effected,



[ Doc. No. 18.]

AND MARYLAND BRIDGE COMPANY.

SHEPHERDSTOWN, Nov. 8, 1861.

DRINKARD, Esq.

Annexed you will find the report of the Virginia and Maryland bridge company for the year ending September 30th, the preparation and completion of which have been unavoidably delayed until this

I have been directed to state that the extra work which was done by the contractor was paid him as it was estimated and allowed by the engineer of the company, Charles B. Fisk, Esq. and that the logs of the bridge were used in it for that purpose.

The only indebtedness of the company is the mortgage before recorded. A dividend will be declared, payable in January 1862.

Very respectfully,

JOHN M. JEWETT, Sec'y  
Va. & Md. B. Co.

*Return of the state of the Finances of the Potomac Bridge Company for the year ending the 24th of May 1851.*

To cash received from private stockholders of the 1st instalment of \$5 on each share,	-	-	2,400 00	
To cash received from ditto, of 2d instalment,	-	-	2,265 00	
" " " 3d " "	-	-	2,190 00	
" " " 4th " "	-	-	1,455 00	
" " " 5th " "	-	-	75 00	
				8,385 00
To cash received from Board of public works of Virginia :				
State's 1st quota,	-	-	1,600 00	
" 2d quota,	-	-	1,350 00	
" 3d quota,	-	-	1,350 00	
				4,300 00
Total receipts,	-	-	-	12,685 00
Deduct disbursements for the year ending 24th May 1851 :				
Cash paid Abraham Bowers, sen., contractor, his 1st estimate, as made by C. B. Fisk, engineer,	-	-	1,640 00	
Cash paid ditto, his 2d estimate,	-	-	2,260 00	
" " 3d estimate,	-	-	2,138 40	
Cash paid editors Baltimore Sun, for publishing notice of the payment of the 1st instalment,	-	-	3 75	
Cash paid J. P. Schooly's bill, traveling expenses and per diem whilst in the service of the company,	-	-	47 55	
Cash paid editors Loudoun Chronicle, for publishing notice of payment 1st instalment,	-	-	2 00	
Cash paid B. H. Latrobe, for services rendered the company as engineer,	-	-	75 00	
Cash paid Cushing & Brother, for press and seal,	-	-	17 00	
Cash paid editors of Baltimore American, for publishing, and for having published in Philadelphia North American and National Intelligencer, proposals to build bridge,	-	-	10 50	
Cash paid for printing receipts for instalments,	-	-	2 00	
" J. A. Baughman, for ferrying engineer,	-	-	56	
" editor Loudoun Chronicle, for notices in 1847-'48,	-	-	3 50	
" editors Loudoun Chronicle and Washingtonian, for publishing notices 2d instalment,	-	-	1 25	
Cash paid Abraham Bowers, sen., 1st instalment,	-	-	300 00	
" editors Baltimore American, for notice 2d instalment,	-	-	1 00	
" Abraham Bowers, sen., 2d instalment,	-	-	300 00	
" Baltimore American, for notice 3d instalment,	-	-	1 00	
" Abraham Bowers, sen., 3d instalment,	-	-	300 00	
" Baltimore American, for publishing notice of annual meeting of the 24th of May 1851,	-	-	1 75	
Cash paid Chronicle and Washingtonian, for publishing notice of 3d and 4th instalments, and for annual meeting,	-	-	3 13	
Cash paid J. P. Schooly's bill traveling expenses, and per diem whilst in service of company,	-	-	73 88	
Cash paid Charles Williams' bill traveling expenses and per diem whilst in service of company,	-	-	26 05	
Cash paid members of the board directors, including the president, for their per diem allowance whilst attending meetings,	-	-	198 00	
Cash paid members of examining committee,	-	-	6 00	
" president's salary for year ending 24th May 1851,	-	-	150 00	
" secretary's salary for year ending 24th May 1851,	-	-	100 00	
" treasurer,	-	-	200 00	
" John Janney, attorney's fee,	-	-	5 00	
" for books, papers, postage, &c.	-	-	6 00	
Total disbursements,	-	-		7,873 32
Balance money on hand,	-	-	-	\$ 4,811 68

By order board of president and directors.

SAM'L C. LUCKETT, Treasurer.

Liabilities of company:

For amount due on ferry property, (mortgage,)	-	-		<u>\$ 3,383 33</u>
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Means of payment:

Amount due from stockholders,	-	-	-	193 68	
Bonds and notes invested,	-	-	-	2,104 74	
Rents due April 1st, 1852,	-	-	-	290 00	
Cash on hand,	-	-	-	559 59	
				<u>          </u>	<u>\$ 3,148 01</u>

By order of the board of president and directors.

JOHN M. JEWETT, Sec'y.

## RAILROAD COMPANIES.

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OFFICE VA. AND TENN. RAILROAD CO.  
*Lynchburg, Dec. 5, 1851.*

JAMES BROWN, JR.  
*Second Auditor.*

DEAR SIR,

I have the honor to transmit you herewith a copy of the report of the president and directors of the Virginia and Tennessee railroad company made to the stockholders at their annual meeting on the 26th of November last. This report, with the accompanying documents, shews the condition of the affairs of this company on the 30th day of September 1851, and contains all the information required by the Code of Virginia; also the proceedings of the stockholders in their last general meeting.

I am, very respectfully,

Your ob't serv't,

O. G. CLAY, *Pres.*  
*Va. & Tenn. R. Co.*

*Report of the President and Directors to the Stockholders of the Virginia and Tennessee Railroad Company.*

OFFICE VA. AND TENN. RAILROAD CO.  
November 26, 1851.

To the Stockholders of the  
Virginia and Tennessee Railroad Co.

I have the honor to lay before the stockholders a fourth annual report, shewing the condition of the company. In fulfilling this duty required at my hands by your charter, I shall on the present occasion refer to the reports of the respective officers of the company for the details of the operations during the past year, and limit this report to such subjects as in my judgment are worthy of attention, or may require the immediate action of the stockholders in their general meeting assembled.

Soon after your adjournment in November last, a meeting of the board of directors was held, and the resolution that had been adopted in your recent meeting, "requesting that the salary of the treasurer and clerk be raised to \$1,250 per annum," was duly considered.

The board being fully satisfied that the then incumbent, although diligent and attentive to his business, could not perform the duties of the two offices without an assistant, it was unanimously decided that the treasurer should receive \$1,000 per annum for his services, and act as clerk *pro tempore*; and the president was authorized to procure the services of some suitable person to aid in the despatch of business whenever it became necessary. The board then proceeded to fill these offices. F. G. Morrison was unanimously re-elected—executed his official bond for \$10,000, with security approved by the board—and duly qualified according to law.

When the proposal of Crutwell, Allies & Co. to furnish iron rails for our road was made, such was the condition of things as to require immediate action, and the contract was closed by the board under the firm belief that a reasonable reduction of the tolls would be made by the president and directors of the James river and Kanawha company on the iron ascending the canal. Subsequently, however, upon considering the matter, they did "not feel at liberty to gratify their own desires," and by resolution decided that no reduction of tolls ought to be made on railroad iron, unless the same shall be embraced in the general revision of the tariff of tolls.

In consequence of this decision, at the meeting of the stockholders of the James river and Kanawha company on the 7th of January last, the memorial of the president of the Virginia and Tennessee railroad company was presented by Dr. Early, asking that the iron rails be transported on the canal for the company's road might be sub-  
mitted to the lowest grade of tolls; and I regret to inform the meeting that no reasonable application was not complied with, it being re-  
quested as "impossibilities to reduce the tolls on the iron of the Virginia and Tennessee railroad."

It affords me much pleasure to inform the stockholders that the difference with the Board of public works in the construction of the 15th section of the 66th chapter of the new Code of Virginia, in not considering that the subscription on behalf of the state authorized the said board to appoint more than two directors, has been properly settled without producing a jar in the progress of the work, by an act of the general assembly of Virginia, passed February 20th, 1851, making the state's interest in the stock of the company fully equal to three-fifths thereof. The subscription was accordingly made by the Board of public works, and Joseph Wilson, Esq. was appointed as a third director on the part of the state. Whereupon, Col. Thos. J. Boyd, one of the three directors elected by the stockholders at their last annual meeting, addressed a letter of resignation to the president, which is herewith communicated. In passing from this part of the report, I beg leave to bear testimony to the zeal and untiring devotion which have characterized the services he has rendered the company, and which entitle him to our gratitude.

The board availed themselves of the sale of the property of the Lynchburg manufacturing company, to secure additional room for the erection of such buildings as would be required for the business of the company. The whole cost of this property, including some machinery of value, was \$ 17,087. Its value to the company can scarcely be too highly estimated. This will readily be understood when we compare the area devoted to the warehouse, engine-house and depot yard here, with that of other roads in similar circumstances. The board congratulate themselves on being enabled by this purchase to carry out such plans for the Lynchburg terminus of the road as the interests of the company imperatively demand.

The condition of the finances of the company will be seen in the report of the treasurer, herewith submitted, (marked A. and B;) from which it will appear that the whole number of shares held by others than the state is 9,674, and by the commonwealth 1,125, making together the capital stock \$ 2,092,400.

The balance reported in the treasury at the last annual meeting was \$ 87,265 35. The amount received, in cash and six per cent. bonds, \$ 836,919 20. The disbursements of the current year have amounted to \$ 704,196 90, leaving in the treasury a nett balance of available funds at the end of the fiscal year (30th Sept.) \$ 219,988 05.

To meet the expenses of the company's operations during the past fiscal year, requisitions have been made on the stockholders, from time to time, amounting in all to thirty-five dollars per share. These requisitions have been met with unusual promptness; as a proof of which, the payments made by private stockholders have at all times been in advance of the instalments due from the state.

Since the close of the fiscal year (30th September) the individual subscriptions have been increased \$ 47,500, making the subscription by others than the state, \$ 1,014,900. A corresponding subscription on the part of the commonwealth (viz.  $\frac{2}{5}$ ) would be \$ 1,522,350, making together \$ 2,537,250.

In addition to this, the counties of Washington and Smyth have, by

a vote of the people, determined to make county subscriptions to the stock of the company of \$53,400, which will draw from the state \$80,100, making a gross addition to the means of the company of \$133,500.

There is now wanting, as shewn by this estimate, only \$131,100 more of individual subscription to complete the whole capital stock of \$3,000,000.

It was known to the general assembly, by the estimates laid before them previous to the state becoming interested in this work, that the capital of the company would have to be increased to some extent.

As the legislature of Virginia will in future meet only once in two years, some step must be taken at the approaching session to procure the necessary increase of the capital stock of the company; and the board suggest, as being good policy, to prevent any interruption in the sure and speedy completion of the work, that authority be given them to make temporary loans in case of necessity, under such restrictions as might be regarded as being prudent and proper. A wise forecast admonishes us to place our credit beyond the reach of contingency.

It was stated in the last annual report that a contract had been made with Crutwell, Allies & Co. for 6,000 tons of rails, to be manufactured of the best iron, and its delivery had commenced.

Of that amount 4,688 tons have been delivered, and I have been advised the balance is all afloat. These rails appear to be of excellent quality and well made.

No exertion has been spared to procure from the landholders a relinquishment of their claims to damages for the right of way through their property. In many cases the proprietors have evinced an enlightened appreciation of the benefits conferred on them by the construction of our improvement, and, with commendable public spirit, given a free relinquishment of all such claims.

It would seem reasonable that the owners of property along a public work, which enhances its value so greatly, should act thus. Still there are many who do not take this view of the matter. The board therefore thought it right to act with a similar spirit of liberality, and have resolved to give such persons as have manifested this friendly disposition towards the work a free passage on the road for three years.

All the claims for the right of way, as far as Salem, have been settled, with the exception of some incidental damages of small amount accruing since the assessments. The greater part of the damages in the second division have been assessed, and a large portion paid; and all remaining claims for damages on the entire location to the Tennessee line will be assessed during the present month.

On the 4th of December last the board placed under contract most of the heavy work between Salem and Wytheville, and subsequently more has been let to contractors of experience and responsibility, on satisfactory terms, and now three light sections only remain, which can easily be finished before wanted.

This step was determined on previously to your last meeting, and indeed many subscriptions to the stock of the company were made under an implied pledge to carry out such a policy. The stockholders at their last meeting, approved the plan as then proposed, and since followed by the board.

For the progress of the work and its present condition, I refer you to the report of the chief engineer, which is herewith communicated.

The board have steadily pursued the instructions given by the stockholders at their second annual meeting, and have done all that sound discretion would permit. Few works in this country have ever progressed more rapidly, and everything has been done that was necessary to make the work perfect and durable.

In pursuance of the settled policy of the company, a letting has been advertised, to take place at Wytheville, of so much of the work between that place and the Tennessee line as the condition of the finances will permit.

The survey for the New river branch, as reported by the chief engineer, shews that a very favorable line can be obtained. It is evident that if a branch of our road be constructed down New river to the mouth of the Greenbrier, this line can carry the tonnage destined for Richmond against *all* competition from other roads. So that even if other interests should require and the state should authorize a road between these points passing through Staunton, it would not diminish the necessity for the branch proposed, nor affect its value.

It is therefore suggested that the board be authorized to apply for such a modification of the charters of this company, as will enable them to construct a railroad down the valley of the New river and Kanawha, with branches to Guyandotte and Point Pleasant.

It is contemplated, in the event of this being done, to keep the stock of the Virginia and Tennessee railroad and that of the branch separate, and make the dividends separate, as is the case on the Baltimore and Ohio railroad and the Washington branch.

Having now acquitted myself of the duties of my official station, in laying before you, as succinctly as I could, the condition of the company, and inviting attention to such measures as are regarded important to its welfare, I flatter myself that the exhibition thus made of the administration of your affairs will satisfy you that every proper attention has been paid to the interest of the company by those who have been entrusted with the management of a work calculated to afford relief to the wants of our common country and elevate the destinies of our beloved old commonwealth.

All which is respectfully submitted.

O. G. CLAY, *Pres't.*



[ Doc. No. 18.]

[ A.]

*The state of the Virginia and Tennessee Railroad Company for the year ending 30th September 1851.*

Total stock authorized by the charter \$ 3,000,000 :		
held by others than the state	9674 shares, at \$100 each, is	967,400 00
by the Commonwealth	11,250 " " "	1,125,000 00
to credit	ent account,	318 75
"	or - gent,	52 93
"	interest account,	760 02
De	savings bank,	20,000 00
"	or real estate, (B. payable account,)	15,800 00
"	of Virginia Lynchburg, (statement B,)	69,226 82
"	via Lynchburg, statement B,)	49,334 77
bal	, (statement B,)	200 00
		<u>\$ 2,248,153 95</u>
Commonwealth's subscription unpaid,	540,000 00	
her subscriptions than the state unpaid,	455,295 38	
Amount expended in construction of work from date :		
"	-	616,985 11
"	-	80,564 58
"	ture, (including iron,)	190,840 74
"	by work	13,257 27
"	to land damages same time,	18,327 99
Amounts expended on other accounts same time, viz :		
Real estate for depot purposes,	-	48,964 05
Contingent expenses,	-	1,559 66
Engineering expenses,	-	41,144 56
Office expense,	-	1,586 20
Personal property account,	-	2,294 53
Repairs, (same as last year,)	-	42 34
Printing, (same as last year,)	-	629 16
Salary account,	-	1,410 60
Amount in hands of agents to be accounted for,	-	10,153 73
Due from individuals for property sold,	-	130 00
Cash on hand, per statement B,	-	219,968 06
		<u>\$ 2,248,153 95</u>

E. E.

F. G. MORRISON, Treasurer.

## [ B. ]

*A Statement of the Receipts and Disbursements for the fiscal year ending 30th September 1851.*

Balance of money on hand, per last annual report,	-	-	87,265 35
Receipts during the year, viz :			
Amount received from others than the state,	-	273,380 64	
“ “ from agents for collections on instalments, &c.	-	29,280 85	
“ “ from Board of public works,	-	390,000 00	
“ “ from interest on instalments, &c.	-	5,259 61	
“ borrowed from Bedford savings bank,	-	20,215 60	
“ received for rent of lumber houses,	-	131 25	
“ “ for personal property sold, (1 horse,)	-	30 00	
“ due Bank of Virginia Lynchburg,	-	69,286 88	
“ due Farmers Bank of Virginia Lynchburg,	-	49,334 77	
Total receipts,	-	-	836,919 60
			<u>924,184 95</u>

NOTE.—The two last items due to the two banks are for checks drawn by the company and cashed by individual members of the board, and are now held by them.

## Deduct disbursements during same time :

## Paid for construction of work, viz :

Graduation,	-	-	-	415,578 34
Masonry,	-	-	-	53,566 87
Superstructure,	-	-	-	184,232 73
Depots, &c.	-	-	-	11,357 35
Paid for salaries of officers, including pay and mileage of directors, &c.	-	-	-	3,954 95
Paid for engineering expenses,	-	-	-	11,748 85
“ land damages,	-	-	-	8,277 64
“ chief engineer, for engineering expenses,	-	-	-	7,448 27
“ office expense, viz : rent, fuel, lights, &c.	-	-	-	640 31
“ treasurer, for office and other expenses,	-	-	-	650 00
“ interest on advanced payments upon stock, &c.	-	-	-	4,828 94
“ contingent expenses, printing reports, &c.	-	-	-	221 00
“ real estate, for depot purposes, recording deeds, &c.	-	-	-	1,060 05
“ bills payable, paid Bedford savings bank, part note,	-	-	-	215 60
“ personal property, (1 iron safe,)	-	-	-	166 00
“ principal assistant engineer, for expenses his party on account,	-	-	-	250 00
Total disbursements,	-	-	-	<u>704,196 90</u>

## Balance of money on hand, viz :

in different banks,	-	-	12,588 05
in corporation Lynchburg 6 per cent. bonds,	-	-	149,400 00
in Richmond city 6 per cent. bonds,	-	-	58,000 00
			<u>\$ 219,988 05</u>

E. E.

F. G. MORRISON, Treasurer.

[ Doc. No. 18.]

*of President, Directors and other Officers and Agents of the  
Georgia and Tennessee Railroad Company, on the 30th day of Sep-  
tember 1851, with the Salaries of each.*

President, O. G. Clay, \$ 1,500 per annum and travelling expenses,  
previously approved by the board of directors;

John Davis, John R. McDaniel, Charles H. Lynch, Thos. L.  
Wilson, Joseph Wilson, directors—\$3 per day while in attendance  
on the board, and fifteen cents per mile for every mile traveled to  
and from meetings of the board, but no per diem when traveling; F.  
Morrison, treasurer—\$ 1,000 per annum.

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*Agents for collecting Instalments upon the Stock of the Company in the  
Counties West of Campbell.*

John A. Clayton, Bedford; A. Neal, Danoke; David Barnett, Mont-  
gomery, Pulaski and Floyd; F. Morrison, Wythe; Wm. W. Har-  
rison, Smyth; Wm. K. Heiskell, Lexington; Samuel M. Caurant,  
Richmond—2½ per cent. upon collections; John R. Hughes, Lynchburg  
Campbell county, \$ 500.

By order of the president and directors.

F. G. MORRISON, *Treas.*

*List of Engineers in the employment of the Virginia and Tennessee Railroad Company, on the 30th day of September 1851, with the Salary of each.*

Charles F. M. Garnett, chief engineer,	-	-	-	\$ 3,600
Andrew Ellison, jr. principal assistant engineer,	-	-	-	2,500
Wm. S. Ellison, division engineer,	-	-	-	1,200
Montgomery Lynch, division engineer,	-	-	-	1,200
James H. Buford, assistant	"	-	-	840
Robert L. Owen,	"	"	-	840
Walter Izard,	"	"	-	720
Theodore Moreno,	"	"	-	720
Peter Copland,	"	"	-	720
M. Green Peyton,	"	"	-	720
Charles H. Dimmock,	"	"	-	720
F. S. Mosby,	"	"	-	720
Christ. V. Winfree,	"	"	-	720
S. T. Pendleton,	"	"	-	720
Ed. Winston, jr. rodman,	-	-	-	360
Jas. M. Daniel, jr.	"	-	-	360
W. W. Woolfolk,	"	-	-	360

N. B.—All the salaries cover every expense, except that of the division engineer residing in Lynchburg, to whom an allowance of ten dollars per month is made for extra expenses, and the necessary expenses of the exploring party while in camp. In this party are Messrs. Owen, Pendleton, Winston and Woolfolk.

By order of the president and directors.

F. G. MORRISON, *Treas.*

## ENGINEER'S REPORT.

ENG'R'S OFF. VA. AND TENN. RAILROAD,  
November 25th, 1851.

To the President and Directors  
Va. and Tenn. Railroad Company.

GENTLEMEN,

In compliance with established usage, I present the following annual report:

The difficulties encountered in executing the work between Lynchburg and Salem have been greater than was expected. Every part of the work has been prosecuted diligently, and on the deep excavations containing rock all the force that could be worked to advantage has been employed. It was, however, found impossible to complete the difficult points in time to lay the whole track as soon as proposed.

These points being near the eastern terminus of the road, it was necessary to incur some expense hauling iron, in order to finish the track at as early a day as possible. This additional expense will be amply repaid by the use of the road some months sooner than could otherwise be expected.

It may now be promised with certainty that the road will be in operation to Liberty in the month of January, to Buford's in the month of March, and to Salem in July—and ten miles beyond Salem can go into operation in six weeks after the road reaches that point. For this ten miles the iron is not yet purchased.

The track of this road consists of a  $\Omega$  rail weighing 60 lbs. to the yard, laid on substantial oak, chestnut or locust cross ties 9 feet long, averaging in size about  $6\frac{1}{2} \times 10$  inches, and laid every two and a half feet. The timber is much larger and of better quality than that generally used on railroads, affording great firmness and security to the track. The iron rails are of the very best quality of imported rails. The chairs are cast iron of the very best quality that can be made from the Virginia ores: they weigh 19 lbs. and are cast with a projection to fit into the hollow of the rail. This metal possesses great toughness. The spikes, too, are made of the very best bar that can be produced from Virginia charcoal pig, and are superior to any others made from different metals.

This track is believed to combine every quality essential to a good road, in an eminent degree, and to secure in the future operations of the company both safety and economy. Few, if any, can be found of better materials or better construction. The passenger trains will be able to attain a speed of thirty miles per hour on this road with perfect safety.

Under the contract with Mr. F. B. Deane, jr. the cars necessary to equip the road are now in process of construction at this place, and the quality of the work, as far as it has progressed, is such as to vindicate fully the policy of the board in securing these articles of Virginia manufacture. A sufficient number of these cars for present use will be completed by the end of next month.

The contract with Joseph R. Anderson, Esq. of Richmond was limited to five locomotives, one of which is to be completed by the 1st of December, and can be on the road by the middle of that month.

Great care has been used in selecting the materials for these machines, and it is confidently hoped that their performance will be such as to do credit to the enterprising builder. This gentleman has recently associated with himself Mr. John Souther of Boston, whose reputation stands deservedly high among the New England manufacturers. They will be prepared to complete four or more locomotives per month, and it is hoped they will receive southern patronage, such as will enable them to build up in the southern states an establishment of the first class. Their success will prove highly important to the whole South, and is a matter of peculiar interest to the railroads of Virginia.

As it was a matter of great importance to have a locomotive on the road by the 15th December, it was thought most prudent to guard against any possible delay in the delivery of those already contracted for by the purchase of one from Mr. Souther, to be shipped from Boston on the 27th inst.

The plans for accommodating the business of the road at Lynchburg have been greatly enlarged since the period of my last report. The purchase of the cotton factory property has made room for an engine-house and machine shop. The buildings now in progress here are absolutely necessary for the accommodation of our business, but previous to this last purchase there was not ground enough to erect them on. The arrangements now made are as perfect as the space occupied will admit of, and will accommodate a very large business, though the time may come when a larger surface of ground might be advantageously used.

I would call your attention to the provision in the general railroad law, which forbids companies to acquire more than three acres of land in any one parcel. Three acres are the smallest amount which will be required for the most ordinary country depot. The space covered by the buildings and that occupied by wood for the supply of the engines will leave no more than enough for the wagons to stand on which are engaged in transportation to and from the road.

At the termini of the road, and whenever an unusual amount of business is expected, more than three acres will be required.

The Boston and Worcester railroad company have found it necessary to add to their grounds in Boston, at different periods and at an enormous expense, until they have reached the amount of nine or ten acres. The Baltimore and Ohio railroad company have acquired forty acres in Baltimore, which, it is thought, will be highly advantageous to their business.

The Georgia railroad company commenced with what they considered an ample allowance of ground in Augusta. They found it necessary to purchase more after a great increase had taken place in the value of land around. The same deficiency of room was again discovered, until, by three successive purchases, at higher prices each time, they have now acquired fifteen acres in Augusta, which they

find little enough for their business. As yet there has been no great freight road in Virginia, and many are not aware of what is required for the depot of such a road.

A great amount of work has been done on the line between Salem and Wytheville, a heavy force having been engaged for the past year. The ten miles ascending the Alleghany mountain north of Christiansburg constitute the heaviest portion of our work, and it would be difficult to complete it sooner than May 1853. If the remainder of the road could be let by August next, all the graduation could easily be completed as soon as this ten miles.

After the grading is completed the superstructure can be laid at the rate of ten miles per month. This would secure the completion of the work by June 1854, if no delay should occur for the want of money, even if the remainder of the line should not be placed under contract until the end of next year—so that nothing would be gained by placing the light work beyond Wytheville under contract before a year hence. The greater part of the distance between Wytheville and the state line is very light.

A party of engineers has been employed for the last twelve months in revising and improving the line from Salem to the state line, and completing the definite location, with the exception of a few weeks devoted to the New river survey. The exact length of the road, as now located, is  $204\frac{6}{16}$  miles; and these examinations have resulted in important improvements in the character of the line. It is believed that some time may yet be profitably spent in this way. A company can pay no money more profitably than that which is expended in the thorough examination of the country before a final location is made.

The party were engaged about six weeks in making a survey from a point near Christiansburg on our road, down New river, to the mouth of Indian creek. At this point they connected with a survey made under the authority of the state. From Christiansburg to Indian creek a very favorable route was found. No grade exceeding 60 feet per mile, rising eastward, and none greater than 68 feet per mile, falling eastward, would be required—thus preserving the same limits of graduation used on the Virginia and Tennessee railroad. The descent from the summit at Christiansburg is by a succession of grades, none exceeding 60 feet per mile, and no very expensive work is encountered.

The valley of New river is reached near Major James Kent's, after which the work is light and the grades are very gentle. In a few places the maximum grades are used for short distances to cut off bends of the river and save distance.

From Christiansburg to the mouth of Indian creek is  $62\frac{1}{2}$  miles, and will cost \$1,062,500, or \$17,000 per mile. We find in Mr. Shaw's report the distance from Indian creek to Greenbrier to be  $14\frac{1}{2}$  miles, and the cost of graduation, bridging and masonry to be \$77,760. Adding \$105,000 for superstructure will give for the cost of  $77\frac{1}{2}$  miles, from Christiansburg to the mouth of Greenbrier, \$1,235,260, or a fraction under \$16,000 per mile. But to cover the cost of depots, cars, engines and all contingencies, we will call it \$20,000 per mile, which for  $77\frac{1}{2}$  miles, is \$1,545,000.

Let us compare the two routes proposed between the mouth of Greenbrier and Richmond. First, by the Central railroad we have the following distances:

From Richmond to Charlottesville,	-	-	100 mls.
From Charlottesville to Staunton,	-	-	40 "
From Staunton to Covington,	-	-	70 "
From Covington to mouth of Greenbrier,	.	-	76½ "
			<hr/>
			286½
			<hr/>

The distances, by way of Christiansburg, Lynchburg, &c. are,			
From Richmond to Lynchburg,	-	-	115 mls.
From Lynchburg to Christiansburg,	-	-	86 "
From Christiansburg to mouth of Greenbrier,	-	-	77½ "
			<hr/>
			278½
			<hr/>

Making a distance of 7½ miles in favor of the Lynchburg route. On this route the grades are 60 feet per mile opposing the heavy trade, and 68 feet with it, while on the Covington and Staunton route there are grades of 105 feet per mile both ways—five continuous miles of it on the eastern slope and 1½ on the western slope of the mountain. This last may be substituted by 2 miles of 92½ feet per mile, but of course the expense would be increased.

This feature alone would enable the Lynchburg line to compete successfully with the Central railroad for all the tonnage offered for transportation between the mouth of Greenbrier and the city of Richmond. But suppose this western trade or any portion of it to be destined for Petersburg or Norfolk, this road would then be 30 miles shorter than the Central to either of these points.

So that the Lynchburg route is the shortest for all three of the towns on the lower James river; and a trade sufficient to increase them all three beyond the most sanguine expectations of their friends, and build them up into large cities capable of entering into competition with the great markets of the North, would be secured to them and carried out of the reach of Baltimore.

With a railroad from Staunton to Winchester, it would not be difficult to predict where all the tonnage brought from New river to Staunton would find a market. There should be no rivalry between the markets of Virginia: if true to themselves they can all flourish. Let them lay aside all jealousies, and exert their united strength to complete the shortest, the cheapest, the most efficient and in *all respects* the best route to the Ohio river as well as to the Tennessee line. Let each town and city secure a connection with this great trunk, and there will be a commerce poured down on our eastern border which will fill the measure of their prosperity. Such a system, faithfully carried out, would at once erect Virginia, with her diversified interests and pursuits, into a powerful empire. Let them faithfully investigate the subject and adopt the best route, whichever that may be.

And here let us take another view of this question.



It has been shewn that the line through Lynchburg gives Richmond the nearest line, with the best grades to the mouth of Greenbrier. The stock is already provided and a large portion of the work is done, for a road from Richmond to Christiansburg, within  $77\frac{1}{2}$  miles of the mouth of Greenbrier. This distance alone remains to be provided for, and will cost at the utmost \$1,545,000.

Now suppose the Central road to be completed to a point 16 miles west of Charlottesville: this is within 170 miles of the mouth of Greenbrier, with the Blue Ridge tunnel to go through; and the most favorable estimates ever yet made would warrant us in supposing that there was yet required \$20,000 per mile for this whole distance, or \$3,400,000.

Deduct the distance and cost of a road between Christiansburg and the mouth of Greenbrier, and it will be evident that the state must make  $92\frac{1}{2}$  miles more of new road and spend \$1,855,000 more money to construct this road than would be required to accomplish the very same object by the line through Lynchburg.

In this comparison the Central railroad has received the benefit of the lowest estimates ever made by any one for it. Major Walter Gwynn, chief engineer of the James river and Kanawha company, has expressed the opinion, in his last report, that it will cost a great deal more.

It may be added that the gauge of track on the Lynchburg route gives it a great superiority over the other, and that all of the one is laid with a substantial rail, while most of the distance between Richmond and Charlottesville is laid with plate rail.

It seems, therefore, that though the Central road may be valuable as a local work, and may in that light deserve the patronage of the state, there can be no question as to the best route from the valley of New river to Richmond being through the Virginia and Tennessee railroad.

This question, after all, is of far greater importance to the state at large, and especially to tide water and the country between the mouth of Greenbrier and the Ohio river, than it is to the Virginia and Tennessee railroad company. These distant sections of the state have a deep and vital interest in securing their union by the most certain and efficient method that can be adopted.

To complete this scheme, the road from Petersburg to Norfolk should be finished. Then the road should be extended down the valley of the Kanawha to a point below the mouth of Coal river. Thence one branch should extend to the mouth of the Kanawha, continuing across the Ohio river to Chilicothe, where it would intersect the great Cincinnati and Belpre road. Another branch should go to Guyandotte, and be extended to meet the line of roads running from Louisville, through Frankfort, in that direction.

It has been asserted that a railroad from Cincinnati to Richmond could not compete with the Baltimore and Ohio road, because the latter is the shortest by a few miles.

The distance from Cincinnati by way of Parkersburg and the railroad to Baltimore, is 580 miles. The distance by the Virginia Central road to Richmond is 600 miles. By the Virginia and Tennessee

road, as was shewn, the distance is  $7\frac{3}{4}$  miles less, leaving only  $12\frac{1}{4}$  miles in favor of Baltimore.

If we apply to this case the rule generally used for assigning to a certain amount of ascents and descents on a road their equivalent in distance, we will find the route by Lynchburg to be very greatly the shortest. On the Baltimore and Ohio railroad there is one continuous grade twelve miles long, of 116 feet per mile. There are many other grades on that road less than this but still much higher than those on the Virginia and Tennessee railroad. On this road, as before stated, the limits are 60 feet per mile in one direction and 68 feet in the other. This would give an incalculable advantage to our line. The Baltimore and Ohio railroad company have tried to obviate the difficulty of these high grades by the use of heavy engines, which crushed their track rapidly. The laws of gravity are stubborn facts, which can neither be removed nor overcome. Other things being equal, the expense of transportation on the road will be in proportion as that road approaches or departs from a level.

To give a clear idea of the rapid decrease of the effective power of a locomotive as the grade increases, the following table is given, shewing the nett weight (in tons of 2,000 lbs.) which can be drawn by a 24 ton engine with eight drawing wheels on different grades from a level to 120 feet per mile :

Grade, Weight,	FEET PER MILE.												
	Level.	10	20	30	40	50	60	70	80	90	100	110	120
	616	408	307	243	202	168	144	126	112	100	90	82	74

Some idea may be formed of the relative cost of transportation over different grades by a glance at this table. The effective power of a locomotive on a grade of 68 feet per mile, is nearly 70 per cent. greater than on one of 116 feet per mile.

It is clear, therefore, that if Virginia constructs the best road that can be made from the Ohio river to Richmond and the other Chesapeake markets of the state, that road can compete successfully with the Baltimore and Ohio road for tonnage. But it is of vital importance that Virginia should avail herself of every advantage that nature has given her in such a close contest. With regard to travel, much of it will follow the tonnage, but that which leaves Cincinnati or Chilicothe for Baltimore and points north of it, will not come through Richmond.

To apply the above table in a comparison between the Central and the Virginia and Tennessee railroad, taking 105 feet per mile as the ruling grade on one, and 68 feet as the ruling grade on the other, it will be found that the locomotive would draw a nett weight on the Virginia and Tennessee railroad about 51 per cent. greater than it could draw on the Central railroad.

There is nothing of more importance to the success of a road than the proper adjustment of the tariff of freights ; and as that subject will require the early attention of the board, it has been thought proper to

make some recommendations in reference to it, founded on the results of a somewhat extended experience. The great reduction in the cost of transportation, which only a few years ago was six cents per ton per mile, and is now variously estimated at from one to two cents per ton per mile, is one of the most wonderful as well as gratifying features in railroad progress. Only 22 years have elapsed since the invention of the locomotive on such a plan as to be practically useful. If such rapid advances have been made in the economy of its operation in so short a time, we may confidently expect farther improvements, and a very few years may see the present rates of transportation greatly reduced.

A correspondent of the Philadelphia Ledger says: "The Reading railroad employs in all about 1,500 persons, at salaries and wages respectively of about \$60,000 per month, or \$720,000 per annum. It consumes materials in value of \$20,000 per month, or about \$5,000 a week, causing in all (consumption of materials, salaries and wages,) an annual outlay of \$960,000—all expended on its own ground. Some of the items of its manufacture are particularly interesting and striking. Thus, it manufactures 30 wheels a day to perpetuate its machinery and cars, and requires annually from seven to eight hundred tons of new rails for repairs only. It consumes daily 450 cords of wood, and evaporates, in the same space of time, half a million gallons of water.

"Yet, with all the expenses of the road, the employment of so many hands, the consumption of fuel, labor, repairs, &c., the cost of transportation falls short of 62 cents per ton, such is the enormous quantity of coal brought down every year for consumption. Indeed the Reading railroad transports more tons of merchandize, and receives more per mile than any railroad in the world, and exceeds, in this respect, both the Great Western and the London and Birmingham railroads in England."

This has been copied to shew the extremely low cost of transportation under the most favorable circumstances. This road is 100 miles long, and the cost of transportation is  $\frac{62}{100}$  of a cent per ton per mile.

This low cost is owing to several causes which do not ordinarily exist.

First, the extraordinary amount of tonnage carried; secondly, its homogeneous character, consisting chiefly of coal; thirdly, its being transported the whole length of the road; and lastly, the fact that this great bulk of coal is carried either on a level or down grade over the entire distance, shewing conclusively the influence of grades on the cost of transportation.

One improvement in the Virginia and Tennessee railroad—its increase of gauge over any other road heretofore completed in this state—may be safely estimated as an advantage of two and a half per cent. on the cost of transportation, and probably more. This gauge is five feet, and might undoubtedly have been enlarged still more with advantageous results; but it was thought best to make it correspond with that of all the roads leading from this to the Southwest. There

are only two roads in the United States of greater gauge—the New York and Erie has a width of six feet. Many believe that this is too great, and that the true point of maximum effect and minimum cost lies between five and six feet. The extremely low tariff of freights now established on the New York and Erie railroad will soon test the value of their plan.

Long railroads can transport at a much lower cost per mile than short ones, because, in the first place, a larger amount of tonnage may naturally be expected, and a smaller rate of profit will make an equal amount of gross earnings. Secondly, many items of annual expense on a railroad are fixed quantities, and do not increase with the length of the road. The third reason is in fact the ground of the first. The area of country tributary to a road is bounded by lines commencing at the beginning of the road, and diverging from the line of road on each side until the other terminus is reached. This law, however, is often modified by other considerations. In consequence of this, a reduction of freight at a point distant from the depot of delivery has a much larger area of country to act on in stimulating increased production to compensate for lower charges.

In adjusting the rates of freight on different articles, regard must be had to their value. It would be folly to charge on a bale of silks no more than on a barrel of flour. The same rule must prevail in this case which governs a merchant who sells some things at a large and others at a small profit. Some articles will bear a much higher charge than others without affecting their consumption. There are things which should be carried at very near cost, and, if necessary, at less than cost. For instance, concentrated manures, such as plaster and guano, should be carried certainly low enough to promote and extend their use, even if that should be less than cost, since the consequent increase of agricultural productions will pay the company for transporting the manures.

The charge on dry goods is of very little consequence compared with expedition in transporting them. On the roads leading from Boston, New York, Philadelphia and Baltimore west, there is not as much difference made in the freight on dry goods and cheaper articles as the true interests of the roads would dictate.

This is on account of the contest between those cities to supply the West with merchandize; and the merchants of those cities being the chief stockholders, are anxious to keep the cost of transporting their goods to the West low enough in each case to compete with their rivals.

These same considerations will apply to our road when it is connected with the Mississippi Valley, and we come in direct competition with the Northern cities and their great Western lines of road. Any tariff which would now be thought reasonable must then undergo serious modifications. There is another feature in this subject requiring explanation. The rates charged for short distances should be much higher than for longer distances. There are many reasons for this. The receiving, storing, loading, unloading and delivery of a bushel of wheat is the same, whether it be transported ten miles or two hundred, and the risk is nearly the same. In the next place,

there are many items of expense on a road which are fixed quantities. All the salaries on the road and the interest on capital remain the same, whether the tonnage be transported over half its length or the whole. Again, suppose one locomotive to start from the extreme end of the road with a full load, and another with a small portion of a load, to be completed by adding on a car at each depot as it passes. In each case the locomotive and the men employed would be the same, and the only items of expense incurred by the first engine in addition to that sustained by the other, would be a small amount of fuel and oil and the wear and tear due to each additional car for the increased distance it had to run. And, lastly, the tonnage over the shorter distances to reach market will bear a much higher rate of charge per mile than that which had to be transported over the longer distance.

It should be borne in mind that the great staples of the country traversed by this road must be meat and breadstuffs. In regulating the charges on these items, care must be taken that they should be allowed to meet the productions of other parts of the United States on an equal footing in foreign markets. They must leave the Capes of Virginia with no greater transit charges on them than have to be borne by the same articles leaving the harbors of Boston and New York. *This can be done.* Nor is this all: the grain of Southwestern Virginia must meet that which is shipped from the ports on the Baltic in the markets of England. For unless these articles can be exported, the supply would soon outstrip the demand. Hence the necessity for charging low freights on them, and thus bringing them into all foreign markets on an equal footing with the productions of other food-exporting countries.

With these reflections, a tariff of freights on the leading articles of commerce is submitted. It is believed that every item in this tariff will be reduced at an early day; and by adopting it, the public will only have an assurance that these rates will not be exceeded. It is believed that this assurance will have a good effect, as many do not believe that such low rates will be adopted, and require this tangible evidence of the fact.

All of which is respectfully submitted.

CHARLES F. M. GARNETT,  
*Chief Engineer.*

Between Lynchburg and	Miles.	First Class, per Foot.	Second Class, per 100 lbs.	Third Class, per 100 lbs.	Fourth Class, per 100 lbs.	Flour, per Barrel.	Wheat, per Bushel.	Corn, per Bushel.	Pig Iron and Lead, per Ton of 3000 lbs.	Lumber, per 1000 Feet, B. M.	Tobacco in Hhds. per 100 lbs.
Forest depot,	10	■	10	10	10	12	4	4	1 50	2 00	8
Liberty,	25	4	20	15	12	20	5	5	1 75	3 00	11
Beauford's,	38	5	25	18	15	25	6	6	■ ■ ■	3 50	14
Salem,	60	6	40	25	20	35	8½	7	2 50	4 00	18
Christiansb'rg,	86	7	50	30	25	37	10	8	3 00	4 50	24
Newbern,	106	9	■ ■ ■	40	30	40	11	9	3 50	5 50	30
Wytheville,	■ ■ ■	10	65	45	35	45	12	10	4 00	6 50	32
Marion,	163	11	70	50	■ ■ ■	48	13	11	4 50	7 00	35
Abingdon,	190	12	75	55	40	52	14	12	5 00	8 00	38
State line,	206	14	80	60	45	55	15	13	5 50	9 00	40

Plaster, per ton of 2,000 lbs. { 50 miles, \$1 50  
100 " 2 00  
150 " 2 50  
200 " 3 00

Salt, per bushel of 50 lbs. { 8  
10  
11  
12

Articles appropriate to the First Class: Boxes of hats, bonnets and furniture.

Articles appropriate to the Second Class: Boxes and bales of dry goods, feathers, shoes, saddlery, glass, paints, oils, drugs and confectionery.

Articles appropriate to the Third Class: Virginia domestics, sugar, coffee, liquor, bagging, rope, butter, cheese, manufactured tobacco, leather, hides, cotton yarns, copper, tin, sheet iron, hollowware, queenware, crockery, castings, hardware, marble, (dressed,) and other heavy articles not enumerated in special or fourth class rates.

Articles appropriate to the Fourth Class: Flour, (in sacks,) rice, pork, beef, fish, lard, tallow and bacon, (in casks, boxes or sacks,) beeswax, bales of rags, ginseng and dried fruit, bar iron, marble, (undressed,) mill and grindstones, mill gearing.



WYTHEVILLE, May 1st, 1861.

Gen. O. G. CLAY, President  
Va. and Tennessee Railroad Co.

DEAR SIR,

I hereby tender, through you, my resignation of the office of member of the board of directors of the Virginia and Tennessee railroad company. It is due to the individual stockholders—by whose kindness and partiality I have been honored with this office from the organization of the company—as well as to myself, to state why I now surrender this important trust. At the last annual meeting of the stockholders of the company, the stockholders appointed, on their part, Messrs. Henry Davis, John R. McDaniel and myself as three out of the five directors of the company for the ensuing year, while the Board of public works claimed, on behalf of the state, the right to appoint the same number, although the state's subscription, under the law, as it then was, could not quite reach three-fifths of the whole stock. The 3d annual report of the president and directors of the company and the report of the Board of public works to the last legislature furnish a full report of the controversy on this subject. A few days after this meeting of the stockholders, the Board of public works declined to pay a draft of the company for a part of the state's subscription, upon the ground, I was informed, that the board of directors was not legally constituted. This objection, however, was waived shortly after, and the draft was paid. I know of no similar objection since, but believe the drafts of the company have been regularly paid. The legislature, at its recent session, since the meeting of the stockholders, passed an act authorizing the Board of public works to increase the state's subscription to an amount fully equal to three-fifths of the whole stock.

This increased subscription has been made, and the state has acquired a right to three out of the five directors of the company. By the provisions of the Code of Virginia on the subject, I believe this right cannot be exercised till the next annual meeting of the company. The Board of public works, however, have taken a different view of their rights, and have appointed Mr. Joseph Wilson of Liberty in Bedford county, a third director on the part of the state, with the view of his becoming a member of the present directory, and of displacing one of the three who were appointed by the stockholders at the last annual meeting. To remove all conflict and ensure harmony between the Board of public works and the individual stockholders, and to prevent a recurrence of anything that might tend to impair the company's credit or retard its operations, I think it better that one of the three directors appointed by the stockholders should resign and create a vacancy, to be filled by the appointment of Mr. Wilson by the board of directors themselves, who alone, in my opinion, have the right by the provisions of the Code to fill such vacancy. With a view

to effect the object referred to, Mr. Davis and Mr. McDaniel, while I was in Lynchburg some days ago, each expressed a willingness to resign. The interest and convenience of the company demand that they should continue in the directory, and I cheerfully yield my place, believing that I thereby subserve the best interests of the company. I yield the more willingly, because, from what I have been able to learn of Mr. Wilson, I believe there is no man more worthy of the confidence of his fellow men, and no one by whom the interest both of the state and individual stockholders will be more carefully guarded and protected.

Have the goodness to furnish a copy of this letter to one of the editors in Lynchburg, with a request that he will give it a place in his paper, in order that the stockholders of the company, to whom I take occasion here to tender my sincere thanks for their confidence and kindness, so generously manifested on four occasions, may know why I have left their service. Please remember me most kindly and respectfully to the other members of the directory, and accept for yourself assurances of the warmest regard of

Truly, your friend and obedient servant,

THOMAS J. BOYD.



*Official Report of the Virginia and Tennessee Railroad.*

At the fourth annual meeting of the stockholders of the Virginia and Tennessee railroad company, held in the Masonic hall in the town of Lynchburg on Wednesday, the 26th day of November 1851:

The meeting was organized by the appointment of Hon. D. A. Wilson, chairman, and F. G. Morrison and Wm. B. Roane, secretaries.

The roll of stockholders was then called, and there were found to be present in person and by proxy 453 stockholders, other than the state, owning 8,318 shares, entitled to 4,104 votes, and the commonwealth of Virginia by her proxy, owning 11,250 shares, entitled to 1,245 votes, being a majority of all the votes which could legally be given upon all the stock which had been subscribed; whereupon the meeting proceeded to business.

The chairman then appointed Messrs. R. J. Davis, C. Dimmock and W. I. Anderson a committee under the 8th by-law to examine the proxies, who having performed that duty, made a verbal report declaring them to be in form; which report was adopted.

The reports of the president and chief engineer were then presented and severally read, and

On motion of C. L. Mosby, Esq.

*Resolved*, That the communication of the president with the accompanying documents and the report of the chief engineer, be referred to a committee of eleven, with instructions to consider and make report thereon as they may deem expedient; whereupon, the chairman appointed Messrs. C. L. Mosby, T. M. Preston, C. Dimmock, T. J. Boyd, J. G. Meem, W. M. Burwell, W. S. Radford, R. J. Davis, C. Dabney, W. Y. C. White and F. B. Deane, jr. to constitute said committee.

On motion of Mr. Mosby,

*Resolved*, That when this meeting adjourn, it adjourn to meet at 10 o'clock to-morrow morning.

The meeting then adjourned.

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THURSDAY MORNING, 10 o'clock.  
November 27, 1851.

The meeting convened pursuant to adjournment on yesterday, and a quorum being present in person and by proxy, was called to order by the chairman.

The proceedings of the meeting of yesterday were read and approved.

The committee appointed at the last annual meeting, as required by the 8th by-law, made their report, which was read and received, and is in the following words, viz:

To the Stockholders of the Virginia and Tennessee Railroad Co.

The committee appointed at your last annual meeting, in conformity with the 8th by-law of the company, beg leave respectfully to submit the following report, viz :

In consequence of the largely increased operations of the past year, the transactions have been so voluminous that from the brief period allotted them your committee have not been able to give the books and accounts that searching investigation which they desired. They have only had time to examine into the receipts and disbursements of the company from the time of their appointment up to the end of the current fiscal year, including the official bond of the treasurer; and so far as they have been able to carry their investigation, they take pleasure in stating that the books appear to have been neatly and accurately kept, and that each item of disbursement is supported by a satisfactory voucher. They further report, that they have examined the journal and ledger entries throughout, and find all the transactions correctly entered and posted; yet, from an examination of the list of balances taken from the ledger, there appears to be a small discrepancy, doubtless arising from the fact that the accounts on the ledger have not been formally balanced. This discrepancy, they have no doubt, will be found and corrected by the clerk when he comes to strike his balances in proper form for the purpose of transferring them to another ledger.

Your committee would further report, that the official bond of the treasurer for the last year appears to be in proper form, and the security thereto satisfactory, but it seems to your committee that the 8th by-law is either defective or has been improperly construed, in that it requires the absurdity of examining the official bonds at the end instead of the commencement of the year. Your committee beg leave to submit the accompanying synopsis, marked A, prepared by the clerk, which presents a true statement of the condition of the company up to the 30th of September 1851, the end of the current fiscal year—also statement B, exhibiting the receipts and disbursements of the company up to the same period of time, both of which correspond with the balances in detail standing upon the books as of that date.

All of which is respectfully submitted.

S. GARLAND,  
DAVID R. EDLEY,  
JAS. L. CLAYTOR,  
JAS. M. BOYD,  
CHS. W. CHRISTIANSON,  
JNO. H. TYREE.

*Lynchburg, November 28, 1851.*

Mr. Mosby, chairman of the committee appointed to consider and report upon the president's and chief engineer's reports and accompanying documents, submitted a report and recommended the following resolutions, which were severally voted upon and unanimously adopted :

The committee to whom were referred the reports of the president and chief engineer, with the accompanying documents, have had the same under consideration, and now beg leave to report as follows :

1. *Resolved*, That the board of directors be instructed to make application to the next legislature for such increase of the capital stock of the company as may be sufficient to enable them to complete and equip the road to the Tennessee line.

2. *Resolved*, That the board of directors be also instructed to ask for such modification of the existing charter as to enable the company to construct a railroad down the valley of New river and Kanawha—with branches to Guyandotte, or the mouth of Big Sandy and Point Pleasant—keeping the stock expenses and dividends of such branches separate and distinct from those of the main road, in conformity with the report of the president and chief engineer.

3. *Resolved*, That we approve the letting advertised to take place at Wytheville on the 12th December; and in view of the hitherto successful progress of the work, under the policy indicated by the 5th resolution of the stockholders at their second annual meeting, and reaffirmed by the 7th resolution of the last annual meeting, we do cordially recommend the continuance of that policy, and urge on the president and directors, conforming thereto, to apply the resources of the company in their discretion, so as to extend the road as rapidly as practicable to its terminus on the Tennessee line; and then, if adequate means be obtained, to complete the road, according to the views of the chief engineer, by the 1st day of June 1854.

4. *Resolved*, That we approve the efforts of the directory heretofore made to procure a reduction of tolls charged by the James river and Kanawha company upon railroad iron used by this company, and recommend to the board, the renewal of these efforts when they shall deem it expedient.

5. *Resolved*, That the reports of the president and chief engineer and of the examining committee indicate the affairs of the company to be in prosperous and sound condition, and that the president and directors, the principal engineer and corps of engineers and other officers of the company are entitled to the thanks of the stockholders for the fidelity with which they have discharged the respective trusts confided to them.

6. *Resolved*, That in the opinion of the stockholders the provisions of the general railroad law to be found in the new Code, confer on the president and directors the power to make temporary loans of money, to the extent *understood* to be contemplated by the report of the president, and therefore no action either of the stockholders or of the legislature is now necessary upon this point.

Mr. Wm. M. Burwell submitted the following resolutions, viz :

1. *Resolved*, That the Southwestern national railroad passing through

Baltimore, Washington, Richmond, Lynchburg, Knoxville and Huntsville, will furnish the shortest connection between New York and New Orleans, as also the most eligible communication with California.

2. *Resolved*, That the chairman of this meeting be authorized to appoint ——— delegates to a convention to be held in New Orleans in January next, to co-operate in the completion of this important national enterprise.

The chairman appointed Messrs. Wm. M. Burwell, Wyndham Robertson, John D. Murrell, Gen. O. G. Clay, R. K. Cralle, D. W. Burton, Geo. P. Tayloe, Jos. R. Anderson, Thos. L. Preston, Charles D. Yancey, Chas. L. Mosby and F. B. Deane, jr. delegates to said convention.

On motion of Mr. Deane,

*Resolved*, That the time of the next annual meeting be changed to the 1st Wednesday in November, instead of the time it is now held.

On motion of Mr. Mosby,

*Resolved*, That a committee of three be appointed to revise the present by-laws of the company, and that Messrs. Samuel Garland, Ro. J. Davis and Charles W. Christian be appointed to constitute said committee.

The chairman then appointed Messrs, D. R. Edley, A. H. Armistead, David Rhodes, J. H. Tyree, J. M. Boyd, Henry Dunnington and J. M. Warwick a committee to examine the books, accounts, state of the funds, the vouchers for all moneys received and disbursed, and all transactions of the company from their appointment up to the end of the current fiscal year, including official bonds, as required by the 8th by-law.

The meeting then proceeded to the election of a president and two directors for the next ensuing twelve months, when Gen. O. G. Clay was unanimously re-elected president, and Messrs. Henry Davis and John R. McDaniel were unanimously re-elected directors on the part of the stockholders.

On motion,

*Resolved*, That the newspapers published in Lynchburg, Liberty, Salem, Wytheville, Abingdon and Jeffersonville in Tazewell be requested to publish the proceedings of this meeting.

*Resolved*, That two thousand copies of the president's and engineer's reports, with the accompanying documents and proceedings of this meeting, be published in pamphlet form for distribution.

*Resolved*, That the thanks of this meeting be tendered to the chairman for the dignified manner in which he has presided over it, and to the secretaries for the faithful discharge of their duties during its deliberations.

The meeting then adjourned.

DAN'L A. WILSON, *Ch'n.*

F. G. MORRISON, }  
W. B. ROANE, } *Secretaries.*

## APPOMATTOX RAILROAD COMPANY.

PETERSBURG, Dec. 16, 1851.

MR. W. R. DRINKARD, *Secretary*  
*B. P. Works, Richmond, Va.*

SIR,

Enclosed I send you our report, and hope it is satisfactory.

I have in a former report given all the information not herein stated, except the extension of the road. It was only run up the shore some 1,200 or 1,500 feet to the wharves, and if necessary, I will send you a sketch in a short time.

Your obedient servant,

W. E. HINTON, *Pres't.*  
*A. R. Co.*

**Statement of the Affairs of the Appomattox Railroad Company, for the year ending 30th April 1881.**

	1850.	1850.	1850.	1850.	1850.	1850.	1850.	1850.	1850.	1850.	1851.	1851.	1851.	1851.	1851.	TOTAL.
	May	June	July	August	Sept'r.	October	Nov.	Dec.	Jan'y.	Feb.	March	April				
Receipts:																
From Passengers,	360 00	352 25	620 37	469 37	382 25	354 49	291 49	300 87	290 87	222 25	241 49	312 62	4196 32			
" Freight,	824 97	1219 12	1198 82	1888 98	2355 42	1588 54	1609 85	1200 69	1259 62	1215 70	2188 66	1497 23	19045 70			
" Mail,	32 15	32 15	32 15	32 15	32 15	32 15	37 50	37 50	37 50	37 50	37 50	37 50	417 90			
" Sundries,	8 37	8 37	8 37	8 37	8 37	8 37	8 33	8 33	8 33	8 33	8 33	8 33	100 20			
													22762 19			
Disbursements:																
For officers' salaries—president, superintendents, agents, &c.,	194 17	194 17	194 17	194 17	194 17	194 17	194 17	194 17	197 50	197 50	197 50	197 50	2343 26			
For salaries—engine drivers, train conductors, firemen, train hands, &c.,	140 60	140 50	145 50	145 50	150 00	185 50	140 50	190 50	156 27	134 60	174 50	158 60	1862 57			
For wood, oil, and other train expenses,	172 28	172 28	179 16	172 28	172 28	195 28	117 16	156 48	170 23	188 89	143 89	123 64	1863 65			
For lost and damaged goods,	23 05	20 50	2 85	34 37	45 79	2 90	30 47	54 00	412 37	23 87	5 00	-	655 17			
For depot and office expenses, printing, insurance, stationery, &c.,	92 37	15 90	10 72	33 06	18 52	6 63	54 38	49 30	11 01	24 09	33 42	31 20	310 49			
For annual labor,	159 44	159 44	159 44	154 44	154 44	159 44	159 44	159 44	169 67	169 67	169 67	169 67	1954 20			
For extra labor,	36 37	40 84	37 75	200 80	215 14	159 80	119 13	119 05	55 94	75 55	163 26	93 75	1317 38			
For repairs to locomotives, cars, &c.,	81 98	527 43	41 08	92 80	98 20	66 88	33 11	99 15	56 42	75 46	32 47	265 88	1471 86			
For repairs to road,	36 25	66 05	35 80	31 00	81 10	48 35	43 50	37 52	146 34	55 66	71 62	151 27	803 66			
For repairs to depots,	14 00	8 82	-	23 64	5 84	23 55	16 93	-	38 33	14 79	52 97	70 44	289 31			
For wharfage account,	8 50	6 00	8 00	7 00	9 50	12 50	8 50	8 00	12 50	13 50	23 00	25 00	134 00			
For wood-house expenses,	10 00	14 02	10 00	10 00	10 00	21 96	16 58	38 90	18 82	13 88	9 07	-	171 83			
													13257 68			
Interest paid,	-	-	-	-	-	-	-	-	-	-	-	-	9504 44			
Balance, after deducting expenses and interest for twelve months,	-	-	-	-	-	-	-	-	-	-	-	-	6265 50			
													\$ 3338 94			

[ Doc. No. 18.]

RECEIPTS.

cash on hand this date,	-	3,849 17	
receipts as above,	-	<u>22,762 12</u>	\$ <u>26,611 29</u>

DISBURSEMENTS.

th. Amount	expenses for transportation as above,	-	13,267 68	
"	interest paid on corporation bonds,	-	6,265 50	
"	paid for improvements, stock, &c.	-	2,532 66	
"	balance, cash on hand,	-	<u>4,555 48</u>	\$ <u>26,611 29</u>

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W. E. HINTON, Pres't  
Appo. Rail'd Co.

**ORANGE AND ALEXANDRIA RAILROAD COMPANY.***Annual Meeting of the Stockholders of the Orange and Alexandria Railroad Company.*

The stockholders of the Orange and Alexandria railroad company convened at the office of the company in Alexandria, on Thursday the 30th day of October 1851.

On motion of Henry Shackelford, Esq., Richards Payne, Esq. was appointed chairman, and J. H. Reid, clerk of the company, attended as secretary.

On motion of Mr. Shackelford a committee was ordered to examine the powers of proxies. The following were appointed on that committee, to wit: Messrs. Henry Shackelford, of Culpeper, Bailey Shumate, of Fauquier, and Robert Brockett, of Alexandria.

*Resolved*, That a recess of one hour be taken, and that the stockholders then meet at Liberty Hall.

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THURSDAY, 12 o'clock M.

The stockholders assembled at Liberty Hall, and the chairman called the meeting to order.

The committee on proxies not being ready to report, on motion of Mr. McKenzie, the meeting adjourned to half-past 2 o'clock.

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THURSDAY, half-past 2 o'clock.

The stockholders reassembled at Liberty Hall pursuant to adjournment.

Mr. Shackelford of the committee on proxies, made a report which was accepted.

The roll having been called, it appeared there were present, in person and by proxy, stockholders entitled to 3437 votes. The whole number of votes being 4860, a majority thereof appeared to be in attendance.

The president of the company presented the report of the directory with accompanying papers, which were read, and on motion of B. E. Harrison, Esq., were referred to a special committee of five.

The chair appointed said committee as follows: B. E. Harrison, of Prince William; W. D. Massey, of Alexandria; T. R. Love, of Fairfax; John. G. Beale, of Fauquier; Wm. M. Thompson, of Culpeper.

Mr. McKenzie, of Alexandria, of the examining committee under the 17th by-law, presented a report and two resolutions, which were read, and on motion of Mr. R. H. Miller said report was accepted. The resolutions, after discussion, were laid on the table.

On motion of Mr. Shackelford, the resolutions of the examining



committee were taken up; and after further discussion by Messrs. McKenzie, Shackelford, Miller and James Barbour, were adopted.

Mr. R. Jamieson offered the following:

Whereas the Alexandria and Orange railroad did, on the 24th instant, advertise in the Gazette of this town and on a previous occasion, that the cars on their road would run every day, (Sundays excepted;) Be it therefore

*Resolved*, That we cordially approve of that feature of the arrangement, *excluding the Sabbath* as a day of labor.

Also, *Resolved*, That we deem it the true policy and interest of the company to abstain from using their road and machinery on Sunday for the transportation of passengers and merchandize, and hereby respectfully recommend to the president and directors to adhere to said arrangement as one likely to prove profitable and economical in its results.

Which, on motion of Mr. Harrison, were laid on the table until tomorrow.

Mr. Freeman moved to go into an election of president of the company, which was opposed by Mr. Massey, of Alexandria; and after discussion, it was moved by Mr. McKenzie, and carried, that the meeting adjourn until 7 o'clock this evening, and then proceed to the election of president.

#### THURSDAY NIGHT, 7 o'clock.

The stockholders re-assembled according to adjournment.

A letter from George H. Smoot, president of the company, resigning his office as president, was received, read, and on motion of Mr. Love, was ordered to be spread upon the record, and the said resignation accepted.

On motion of Mr. Massey,

*Resolved*, That the thanks of the stockholders be and they are hereby tendered to George H. Smoot, Esq. for the ability, faithfulness and untiring energy with which he has (since the organization of the company) performed the arduous duties of president thereof.

Mr. Brockett nominated John S. Barbour, jr., Esq. for the presidency of this company, and upon the roll being called, Mr. Barbour was elected by the following vote:

For John S. Barbour, jr., 3326; Richards Payne, 5.

Messrs. W. L. Powell and Henry Daingerfield were nominated by Mr. Shackelford, and unanimously elected directors of this company.

Kppa Hunton, Esq. brought to the notice of the stockholders the subject of the junction of the Manassa's Gap road with the road of this company, and offered the following resolution:

*Resolved*, That the president and directors of the Orange and Alexandria railroad be and they are hereby instructed to rescind so much of the contract entered into on the       day of       with E. C. Marshall and others, as relates to the junction of the two roads, and the

prohibition of a depot between Tudor Hall and the Stage Stables ; and they be requested to make the junction on the land of S. Thurman, where the two roads meet, provided the said Marshall and others will consent to the proposed change.

Which resolution was referred to a committee to examine into the subject and report to the present meeting.

The chair appointed the following committee, to wit : Eppa Hunton, Richard M. Smith and Henry Shackelford.

On motion of Mr. Shackelford, leave was granted the committee on the examination of the question of junction to sit during the session of this meeting.

Mr. Shackelford moved to rescind the order appointing a committee on the junction—which was carried.

Mr. Hunton moved again his resolution of enquiry in relation to the junction—which was carried, and Messrs. Eppa Hunton, Richard M. Smith and Henry Shackelford appointed a committee to report to this meeting to-morrow.

Messrs. John Willis, of Orange, George Ficklin, of Culpeper, and Lewis McKenzie, of Alexandria, were nominated by Mr. Freeman, of Culpeper, and elected a committee under the 17th by-law, to examine into the condition, &c., of the company, and report to the next meeting.

Adjourned, to meet again at Liberty Hall to-morrow, at 12 o'clock.

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FRIDAY, October 31st, 1851.

The stockholders assembled at Liberty Hall, according to adjournment.

Col. Eppa Hunton, of the committee on the question of junction of the Manassa's gap railroad with the road of this company, reported, "That after a free conference with the chief engineers of the respective companies and a careful examination of the whole subject, it appears to their satisfaction that the station at Tudor Hall is properly located." The said committee presented the following paper, signed by said engineers, giving their reasons for recommending the junction according to the plan upon which the two companies heretofore based their agreement :

"The chief engineers of the Manassa's gap railroad company and the Orange and Alexandria railroad company, being called upon by the committee of the stockholders to whom the question of the Manassa's junction was referred to give the reasons which decided them to recommend to their respective companies for the said junction to be fixed on the summit level, would briefly state :

"1st. That they were decidedly of opinion that the junction ought to be on a level grade.

"2nd. That the length of the level ought to be the greatest attainable within reasonable limits and not less than one-fourth of a mile.

"3rd. That this decidedly preferable condition was found at no other point than the summit.

"4th. In reply to the question as to the location of the station house and other buildings connected with the road, at one point rather than another, we would state that the object was to fix them as nearly central as practicable, which is attained by their present position, as is evident from an examination of the plat and profile herewith submitted.

"Finally, the advantages of a level to stop, or stand, or start trains upon, are so plain that the engineers think they must be apparent to every one. The opinions of the profession and all men practically engaged upon railroads are unanimous on this question.

"Respectfully submitted.

"JOHN McD. GOLDSBOROUGH,  
THOMAS C. ATKINSON.

"*Alexandria, Oct. 31, 1851.*"

They also offered three resolutions for the adoption of the meeting, which resolutions, after discussion by Messrs. Hunton, Shackelford, W. H. Fowle, and others, were, on motion of Mr. Shackelford, indefinitely postponed.

Mr. B. E. Harrison, of the special committee on the report of the directory, presented a report, which was read and adopted.

Adjourned to meet at 3½ o'clock.

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FRIDAY, 3½ O'CLOCK.

The stockholders met pursuant to adjournment.

On motion of Mr. Shackelford, the rules of the house of delegates of Virginia were adopted as far as applicable to this meeting.

On motion of Mr. McKenzie, of Alexandria,

*Resolved*, That the next annual meeting of the stockholders of this company be held at Culpepper courthouse, on the Thursday after the fourth Monday in October next.

On motion of Col. Hunton of Prince William,

*Resolved*, That the president and directors of this company be, and they are hereby, authorized to dispose of the bonds of this company, issued under authority of a resolution of the stockholders in May last, at such rates and upon such terms as the president and directors may be enabled to effect.

On motion of B. H. Berry, Esq.

*Ordered*, That 800 copies of the proceedings of this meeting, with the reports of the president and directors and the principal accompanying papers, be printed in pamphlet form for the use of the stockholders.

On motion of Mr. Daingerfield, it was unanimously

*Resolved*, That the thanks of the meeting be tendered to the chair

man for the able and dignified manner in which he has presided over its deliberations, and to the secretaries for the faithful discharge of their duties.

The meeting then adjourned, *sine die*.

RICHARDS PAYNE,  
*Chairman.*

J. H. REID, *Sec'y.*

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*Report of the President and Directors of the Orange and Alexandria  
Railroad Company.*

OFF. ORANGE AND ALEXANDRIA RAILROAD CO.  
*Alexandria, October 29, 1851.*

To the Stockholders of the  
Orange and Alexandria Railroad Company.

GENTLEMEN,

The stockholders having ordered the time of the annual meeting to be changed, and only five months having elapsed since the proceedings of the year were made known to you in the report of the board of the 29th of May last, the present communication is of necessity brief.

The board have it in their power to state, that notwithstanding the embarrassment arising from the failure and abandonment of the work by the first company of contractors in November 1850, which resulted in a delay and loss of time equal to six months, the eastern section of the road is nearly completed, and the trains of passenger and freight cars now pass over the distance of 27 miles with a degree of ease and rapidity that shews its construction to be of the very best character.

The magnitude of the difficulties encountered on this location is evident to any one who passes along the road. The cuts at the several summits were particular objects of anxiety, on account of their depth and slippery nature, and required to be prosecuted for a considerable part of the time night and day. The numerous wooden bridges, also, were serious impediments, especially as the lumber had to be procured from abroad, and transported to their places by the railroad as fast as the track was laid.

The business has opened upon the road, both in freight and passengers, to a much larger aggregate amount than its most sanguine friends anticipated.

The work of construction of the remaining portion of the eastern section is in an advanced condition, and no apprehensions are entertained but it will be completed in a very short time.

The work of construction of the middle section has been steadily progressing, and a large portion of the graduation and masonry has been executed, leaving comparatively a small portion to be done be-

fore it will be ready for the work of bridging and tracklaying, which latter will be pressed forward as soon as the iron rails are delivered.

The engagement for these was reported to you in May last, and a portion of the delivery is anticipated to be made during the next month. In this event, the tracklaying can progress with a steady pace to its ultimate completion.

The subscription to the capital stock of the western section, which was so long at a stand still, was taken hold of in the course of the last summer, by the friends of the improvement in that quarter, and by the addition of \$12,700 transferred to it from the surplus of the middle section, was soon carried to \$50,000, which sum was necessary to secure the subscription of \$75,000 on the part of the state. This was promptly made by the Board of public works. There yet remains a deficiency of capital of that section to be subscribed by others than the commonwealth of \$70,000, and by the Board of public works of \$105,000.

The board of directors feeling the importance of the prosecution of this link, not less in affording the facilities of the road to a large body of their stockholders, than in making their connection with the South and West complete so far as their chartered powers extend, took steps immediately to put the work of construction, and also that of the Warrenton branch, under contract.

The bids were received under public notice to the 20th of the present month, and are now under consideration by the board of directors. The surveys and final location of the Warrenton branch have been completed with the exceptions noted below, and estimates of cost made, which for graduation, masonry, railway, switches and stations, amount in the aggregate to \$93,730.

The selection of the place for the station at Warrenton, and of the point of connection with the main line, has not yet been finally resolved upon, but is reserved for future consideration.

The surveys of a branch railroad to the town of Brentsville, and the like to Fairfax courthouse, ordered by resolution in general meeting of stockholders in May last, have not as yet been made, owing to the want of time. It is hoped that this work can be done next month.

The subject of procuring releases and the right of way has been one of the most serious nature, and calculated to produce great embarrassment in a work of limited capital. For some time past the question has been narrowed down to this—that if the demands on the treasury for the right of way had been complied with, the work of graduation must necessarily stop. Under these circumstances the board determined to press forward the work of construction, relying upon the state of facts well known to most of their stockholders, and endeavoring to realize from the issue of the company's bonds funds sufficient to meet the claims of this character as fast as they were adjusted.

They are enabled to say that the greater portion of the claims from this source on the eastern section are paid. A number of cases have been satisfied on the middle section, while a majority of claims are standing which they are anxious to adjust upon proper terms.

The board, in accordance with a resolution of the stockholders adopted at their last meeting, have caused a deed of trust to be executed on the roadway, property and franchises of the company, to secure the payment of \$400,000, principal and interest, of their bonds, which it is proposed to be issued.

To give these securities the full advantage of the money market at home and abroad, the trusteeship was placed in the hands of Gatzert B. Lamar, Esq. president of the Bank of the Republic in the city of New York.

The deed has been entered of record in the several counties through which the road passes, and the bonds are yet in the hands of the engravers. It is hoped that through this means, aided by the collections of money due on stock subscriptions and the revenue arising from the finished portion of the road, the board will be enabled to realize a sufficient sum to prosecute the works energetically to a successful completion at an early day.

Since the meeting of May last, Messrs. E. C. Marshall, Wm. H. Fowle, Charles Hunton, Wm. H. Irwin, James W. Foster and Andrew Pittman, as individual contractors, proposed to the directors of this company to make an agreement for running engines and cars on the railroad of this company, from the junction with the Manassas gap railroad to Alexandria, upon the same terms which had been arranged with the Manassas gap company; and after some modifications of that instrument an agreement was concluded with these individuals.

This agreement your board considered in accordance with the resolution of the stockholders upon the subject, passed at their meeting in May last.

The inadequacy of the original capital stock, together with the heavy cost of the Eastern section, requiring an additional application of more than one hundred thousand dollars in its construction and equipment up to the present period, has tended to lessen the financial ability of the company and to absorb its available resources.

The delay of the stockholders on the Middle section to pay up their instalments makes the present means of the company less than they should be; and without such payments being made shortly, and sales can be effected of the bonds heretofore authorized to be issued, the company will be unable to meet present and coming liabilities.

The board will further state, it is their intention to make application at an early day to the next legislature for an increase of their capital stock, as recommended by a resolution of the stockholders, passed at the meeting in May last.

The accompanying accounts of the clerk and treasurer, marked A and B, will shew the general financial condition of the company at its date, as well as the receipts and expenditures for the current year.

This return exhibits an excess of expenditures over receipts arising from stocks of the Eastern section of \$107,684 68, also an excess on the Western section of \$9,979 16, and on the Warrenton branch of \$2,126 40.

There still remain unexpended \$80,759 88 of the Middle section.



It will be seen that the following sums have been paid in upon the subscriptions of stock for the construction of the road, viz:

For the stock of the "Eastern Section" \$ 336,718, leaving a balance unpaid on the capital stock applicable to this section of \$782.

For the stock of the "Middle Section" \$188,684 92, leaving a balance unpaid on the capital of this section of \$111,315 08.

For the stock of the "Western Section" \$16,602, leaving a balance unpaid upon stock subscribed on this section of \$108,398.

For the stock of the "Warrenton Branch" \$ 5,300, leaving a balance unpaid upon stock subscribed on this branch of \$ 94,700.

There have been expended upon the "Eastern Section" \$444,402 68 cents.

Upon the "Middle Section" \$107,925 04.

Upon the "Western Section" \$ 26,581 16.

And properly chargeable to the "Warrenton Branch" \$ 7,425 40.

The accompanying statement, marked C, is intended to shew the condition of the "Middle Section" which is now, under the peculiar features of the charter, regarded as the creditor party in the company.

The cost of building the "Eastern Section" of the road being far beyond the capital stock of the charter, and the continuous construction of the line rendering it necessary, the loans temporarily negotiated (a part of which is embraced in this report) may be regarded as expended upon that section, and a deficiency for its completion and a share of the equipment and other general charges still remain. This, however, has been without any detriment to the "Middle Section," which has been prosecuted as rapidly as a due regard to the extension of the line westward required, and for which the permanent loan authorized to be effected, it is hoped, will in due time complete the Middle and make more available the Eastern section of the road.

The chief engineer's report herewith communicated, marked D, will shew in detail the progress of the company's operations since the 15th May last.

From this it will be seen that all the unfinished work as far as Culpeper courthouse, except six sections and the masonry of 4 bridges, is now under contract. These have been withheld, partially because they were light jobs, and in part, as in the case of the bridge at the Rappahannock river, from a failure to get a suitable contractor. They should, however, be put under contract at the earliest practicable day.

A list of the persons in the company's employ, shewing in detail the names and compensation of each, is hereto annexed.

All of which is respectfully submitted by authority and on behalf of the board of directors.

GEO. H. SMOOT, *Pres't*

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[A.]

*Return of the state of the Orange and Alexandria Railroad Company from*

	Eastern Section.	Middle Section.	Western Section.	Warrenton Branch.	AGGREGATE.
Am't of subscription unpaid:					
By individuals, -	347 00	38927 06	47858 00	37880 00	125012 06
By state of Virginia, -	435 00	72386 00	65090 00	56820 00	194733 00
Exp'd in construction, to wit:					
Engineering expenses, -	16092 46	14792 46	6500 00	1310 00	39094 91
Real estate, -	1891 74	1891 74	1891 74	630 57	6305 79
Iron rails, -	102550 00	-	-	-	102550 00
Timber for cross-ties, &c. -	15491 10	9466 94	-	-	24958 04
Graduation, masonry, &c. -	277512 20	61320 01	-	-	338832 21
Land damages, -	13022 36	2700 77	-	-	15723 13
Water stations, depot lots, &c. -	1646 61	1646 61	1646 62	426 77	5366 61
General construction, -	372 94	372 94	372 94	124 31	1243 13
General equipment, -	8254 94	8254 94	8254 95	2751 64	27516 47
Transportation, -	-	-	-	-	829 64
Exp'd for prop'ty held by co:					
Surveying instruments, tents, &c. -	1412 89	1412 89	1412 89	470 96	4709 63
Office furniture, -	151 14	151 14	151 14	50 38	503 80
General charges:					
Salaries of president, clerk and treasurer, and chief engineer, -	3056 33	3056 33	3056 33	1018 77	10187 76
Expenses of pres't and directors, -	557 23	557 23	557 22	185 74	1857 42
Office charges, -	242 34	242 34	242 34	80 78	807 80
Repairs of machinery, -	23 80	23 80	23 79	7 93	79 32
Miscellaneous expenses, -	2124 61	2044 90	2471 20	367 55	7008 26
Due from Wm. Eggleston & Co. -	-	-	-	-	34253 74
Stock of the company, subject to redemption, -	-	-	-	-	10430 00
Bal. in cash in banks in Alexandria, -	-	-	-	-	10788 97
	\$445184 68	219240 12	139529 16	102125 40	962381 91

*the Organization thereof on the 11th May 1849 to 1st October 1851.*

	<i>Eastern Section.</i>	<i>Middle Section.</i>	<i>Western Section.</i>	<i>Warrenton Branch.</i>	<i>AGGREGATE.</i>
<b>Capital stock:</b>					
Authorized by the charter, - - -					937,500 00
Increased for Warrenton branch, - - -					100,000 00
					<u>\$1,037,500 00</u>
<b>Subscr'd by corpo'tion of Alex'a and individuals, -</b>	135000 00	120000 00	54500 00	40000 00	349550 00
<b>Subscribed by state of Virginia, -</b>	202500 00	180000 00	75000 00	60000 00	517500 00
<b>Loans negotiated at short time, -</b>	-	-	-	-	59000 00
<b>Due individuals in small sums, -</b>	-	-	-	-	191 79
<b>Balance of interest, -</b>	-	-	-	-	565 46
<b>Rec'd from freight and passengers, -</b>	-	-	-	-	919 67
<b>Delinquent stock, -</b>	-	-	-	-	33984 00
<b>Checks outstanding, -</b>	-	-	-	-	670 99
	<u>\$337500 00</u>	<u>300000 00</u>	<u>129550 00</u>	<u>100000 00</u>	<u>962381 91</u>

**J. H. REID, *Ck and Treas.***

[ B. ]

*Statement of Receipts and Expenditures within*

DISBURSEMENTS.	Eastern Section.	Middle Section.	Western Section.	Warrenton Branch.	AGGREGATE.
For iron rails, - - -	598 45	-	-	-	598 45
Timber for superstructure, cross-ties, &c. - - -	12180 13	9468 94	-	-	21647 07
Graduation, masonry, &c. - - -	245877 55	61320 01	-	-	307297 56
General construction, - - -	372 94	372 94	372 94	124 31	1243 13
General equipment, - - -	7588 94	7588 94	7588 94	2529 65	23296 47
Land damages, - - -	8619 61	2509 77	-	-	11129 38
Water stations, depot lots, &c. - - -	329 66	329 66	329 66	109 69	1098 67
Transportation, - - -	-	-	-	-	828 84
Properly now held by the co. to wit:					
Surveying instruments, tents, &c. - - -	690 63	690 64	690 64	230 21	2302 12
Office furniture, - - -	20 14	20 13	20 13	6 71	67 11
For general charges, to wit:					
Engineering, including sums in chief engineer's hands, - - -	4986 53	4986 53	4986 53	1662 17	16621 76
Expenses of president and directors, - - -	226 93	226 92	226 92	75 64	756 41
Salaries of president, clerk and treasurer, and chief engineer, - - -	1407 33	1407 33	1407 33	469 11	4681 10
Office charges, - - -	76 91	76 91	76 91	25 64	256 37
Real estate, - - -	44 11	44 11	44 10	14 70	147 02
Interest on loans, - - -	-	-	-	-	1929 97
Repairs of machinery, - - -	23 80	23 80	23 79	7 93	79 32
Miscellaneous expenses, - - -	1393 54	1074 98	1747 68	168 08	4384 28
Checks not in at last settlement, - - -	-	-	-	-	1 23
Debt of Wm. Eggleston & Co. - - -	-	-	-	-	34253 74
Stock of the co. subject to redemption, - - -	-	-	-	-	10430 00
Cash on deposit in banks, - - -	-	-	-	-	10788 97
	\$284537 20	90139 61	17515 57	5424 04	455849 47



## [ C.]

*Orange and Alexandria Railroad Company in account with Middle Section.*

Dr.			
1881.			
Oct. 1.	Amount due from subscribers:		
	Individuals,	-	38,927 08
	State of Virginia,	-	72,388 00
			<u>111,315 08</u>
	Amount expended on the works,	-	107,925 04
	Amount of stock held by the company,	-	10,430 00
	Amount borrowed and used for the Eastern section, as per following statement,	-	47,436 35
	Amount expended, as per report,	-	445,184 88
	Amount of capital, as per report,	-	337,600 00
	Leaving	-	<u>107,684 68</u>
From this sum deduct loans and other receipts of the company, viz:			
	Loans for	-	59,000 00
	Due individuals,	-	191 79
	Balance of interest,	-	585 46
	Received for freight and passengers,	-	919 67
	Checks outstanding,	-	670 99
			<u>61,367 91</u>
	Less transportation paid,	829 84	
	Difference in debtor and creditor of Eggleston & Co.	289 74	
		<u>1,119 58</u>	
			<u>60,248 33</u>
			<u>\$ 47,436 35</u>
	Borrowed and used for Western section,	-	9,979 16
	Do. do. Warrenton branch,	-	2,185 40
	Balance due middle section on deposit in banks,	-	10,788 97
			<u>\$ 300,000 00</u>
Cr.			
1881.			
Oct. 1.	For amount of capital stock,		
		-	<u>\$ 300,000 00</u>

[ D.]

## REPORT OF THE CHIEF ENGINEER.

ENG. OFF. ORANGE AND ALEXANDRIA RAILROAD CO.  
*Alexandria, Oct. 23, 1851.*

To GEORGE H. SMOOT, Esq. *Pres't.*

SIR,

The following report shews the operations of this department since May last, and the present condition of the road.

*1st. Of the Graduation, Masonry and Wooden Bridging.*

These are now complete, or so much so as to admit the track to be laid as far as the 28th mile. The sections thence to the 31st mile, inclusive, will be finished at the present rate of work by the first day of December. The heavy jobs of graduation on the middle section, which are the 33d, 37th, 44th, and 61st, are well under way; and if it is considered desirable to push them, can be completed in the course of the coming spring. The 32d, 36th, 53d and 54th sections are done. The 38th, 42d, 48th and 58th are done, in substance, and require only the dressing for the railway. The remaining sections under contract are prosecuted with a small force, and can be finished in time for the larger jobs.

The refusal of permission to enter upon their lands by several proprietors in Fauquier has retarded the work on three contracts and been productive of great inconvenience.

The sections not yet let are the 39th, 40th, 41st, 50th, 51st and 52d, and are all light.

The masonry of all the bridges on the eastern section is done, excepting three, at Cameron run, the lowest crossing of Pope's head, and Cannon's branch, respectively. The two former are supplied with substantial wooden abutments, which will last from eight to ten years, when they may be replaced with stone, if found advisable, and the latter can be provided for in a similar way. The Broad run bridge is under contract, and more than three-fourths done, one abutment being complete and the pier very nearly so.

All the work of masonry thence to Culpeper courthouse is under contract, except the bridges at Kettle run, Licking run and Rappahannock, with a few unimportant culverts. The latter bridge being the most considerable, and requiring a favorable season to secure the foundations, advantage was taken of the present low stage of water. This object is now mainly effected, and I propose to suspend further operations on it until it is the wish of the company to put it into the hands of a responsible undertaker. The tunnel masonry at Alexandria is still incomplete at the ends, the material being on the ground

to give it the requisite finish in that respect whenever it is considered advisable to resume the work.

The contractor for wooden bridging has his materials all delivered for the bridges on the middle section, and most of them framed for raising. These are now lying in Alexandria, ready to be transported to their proper sites as fast as called for.

#### *2d. The Rail Laying and Materials for the Track.*

The advance of the track was not so fast as was expected, owing to a union of several causes; but principally to the difficulties experienced at the deep and wet cuts at Back Lick, Pohick and Fairfax courthouse ridges.

By unremitting exertions night and day, these were finally made ready; and notwithstanding the present unpromising appearance of the two last named, they will become in time equal in solidity to the best portions of the road. There remains now iron enough for three miles, with the necessary cross ties and fastenings. On the middle section, cross ties have been delivered sufficient to lay 21 miles of track, or to reach continuously to the Rappahannock river. Should the iron for this section come in soon, it will be necessary to press the work at Kettle run, as well as at other points; and even with this pressure, it will not be possible to keep up a continuous extension of the track beyond the 33d mile.

#### *3d. Stations.*

The accommodations for travelers and for the receipt and delivery of freight are in progress, but move slow, owing to those in the country being committed to private interests, and because they have to follow in the rear of the track, their materials being principally transported in the cars from this place.

It is expected that the proprietors will make these arrangements soon; and in those cases where they decline, it will be incumbent on the company to provide for the purpose.

The arrangements at Alexandria extend at present only to the building of a semi-circular house of brick, with sheet iron roof, large enough to accommodate eight engines and tenders with a central turn table and a principal track running diagonally across the lot towards Duke street, reaching to the point designated for the offices, and occupying a part of the ground under the roof of the proposed passenger house. These will all be extended in conformity with the general plan already approved of, as fast as the means of the company will allow, and as it may be ordered by proper authority.

#### *4th. Equipment.*

The company has three engines, three cars for passengers, and thirty-two burden cars. The engine *Virginia*, received from the manufactory of the New Jersey locomotive and machine company,

is an excellent piece of workmanship, and has given entire satisfaction so far.

Messrs. Smith & Perkins have delivered under their contract one locomotive, two passenger cars, one baggage car, and twenty-five burden cars. They have yet one engine and three cars to deliver, which they expect to place on the road in the course of next month. It is due to these gentlemen to say, that the engine they have furnished is of a very superior character, being well proportioned and put together in the most substantial manner, believed to be equal to the best built elsewhere. Our experience demonstrates the mutual advantages of such an establishment immediately adjacent to the road.

The severe accident to the train on the 22d instant disabled the engine Alexandria with its tender and five cars—three very much and two of them only slightly. The amount of damage is not yet ascertained, but it is less than was at first supposed, and will probably not exceed two thousand five hundred dollars.

#### *5th. Letting of New Work.*

The bids for the graduation of the third section and the Warrenton branch are numerous, and are preparing for comparison. As far as examined, they present opportunities for favorable contracts.

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A list of the persons in the employment of this department and the transportation office is herewith submitted, also a statement of the amount of materials on hand for the repairs of the road, and for the use of the stations and shops.

The appointment of Mr. R. H. Middleton to the charge of the completed road made a vacancy in the post of principal assistant engineer on the middle division, which was filled by the selection of Mr. W. G. Atkinson. Mr. Middleton and Mr. Vandegrift, with their assistants, are entitled to credit for the industry and fidelity with which they have discharged their responsible duties.

All of which is respectfully submitted.

T. C. ATKINSON,  
*Chief Engineer.*

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#### *Report of Select Committee.*

The undersigned, appointed to examine and report upon the president's report and accompanying documents, beg leave to report that they have given the subject as careful an examination as their limited time would allow, the books and vouchers being freely opened to their



inspection by the clerk, and find the same to conform to the said report of the president, and exhibit a correct statement of the financial condition of the company. The undersigned see nothing further which it is necessary to recommend.

B. E. HARRISON,  
WM. D. MASSEY,  
T. R. LOVE,  
JOHN. G. BEALE,  
WM. M. THOMPSON,  
*Committee.*

*Alexandria, 31st Oct. 1851.*

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*Examining Committee's Report.*

**To the Stockholders of the  
Orange and Alexandria Railroad Co.**

The undersigned, the Alexandria member of the committee appointed at the last annual meeting of the stockholders under the 17th by-law of the company, submits the following report:

Five months only have elapsed since the last annual meeting. Since that period, the road has been finished to the connection with the Manassas's gap railroad, and trains leave twice a day for the various stations, with freight and passengers. The track, so far as the undersigned is capable of judging, will compare very favorably with any road north or south, and seems to be most substantially built, and with the exception of some cross ties near Alexandria, the materials appear to be of the best quality.

The undersigned has examined the books and accounts so far as his time would permit, and has also examined the proceedings of the board of directors, as they appear by the minutes, which have been freely opened to his inspection by the president and the clerk of the company. The vouchers having been all examined and checked by a committee of the directors, he saw no reason to go into a minute examination of them, but any explanation required was freely given. He has no reason to doubt but that the affairs of the company have been well conducted.

The books have been neatly kept and posted up, shewing the exact state of affairs of the company—the balances in bank compare with the books to a cent, shewing the accuracy and fidelity of the clerk and treasurer. The land damages in the county of Fairfax amount to \$8,800, of which about \$1,100 remains unpaid; in Prince William \$8,700, of which about \$665 not paid, and one claim not assessed; the land damages paid in Fauquier \$100, mostly all given; some, however, not assessed; land damages in Culpeper so far, \$11,127, of which \$1216 paid—balance due. The outstanding bills against the company, which do not appear in the report, because they have not

been adjusted, the engineer reports will amount to from 7 to \$ 9,000.

It appears that the amount received by subscriptions from private stockholders since July is only a little over \$ 2,600, being a small amount towards progressing with a work the monthly expenditures of which have been over \$ 40,000, and the estimates of the present month being reduced to the smallest possible amount, estimated at \$ 27,000.

In view of all these facts, and the limited resources of the company for the last six months, great credit is due to the chief engineer, T. C. Atkinson, Esq. for the energy and zeal with which he has prosecuted the work and carried it at least to a point where it can be made available as well as profitable to the stockholders in the proposed connection with Manassa.

The undersigned, as one of the committee, feels it due to Mr. Atkinson to say thus much, but in doing so he would bear his testimony to the fidelity and energy of the president and directors under whose direction these results have been brought about.

LEWIS McKENZIE.

*Alexandria, October 29th, 1851*

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The undersigned, one of the committee, having only reached Alexandria last evening, begs leave to report that he has examined the books and accounts of the Orange and Alexandria railroad company, as far as time would allow, and concurs fully in the above report, both as regards the chief engineer and the president and directors. He has examined portions of the eastern section as well as the middle section, and finds the condition of the work favorable; but that the work is not progressing as rapidly as it ought on the middle section, is presumed from the fact that the stockholders are backward in paying up their subscriptions. Neither this road nor any other can be built without attention be paid to meeting the various calls for funds. The president and directors cannot carry on the work until this matter is attended to; and upon the stockholders must rest the responsibility, if after this meeting the works do stop.

GEORGE FICKLIN.

*Alexandria, October 30th, 1851.*

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*Resolutions offered by the Examining Committee.*

*Resolved*, That the construction of nearly the whole eastern section of the Orange and Alexandria railroad, and bringing the same into efficient use in the short space of equal to 15 working months, is an

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## TURNPIKE COMPANIES.

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### BUCHANAN TURNPIKE COMPANY.

*To the Board of Public Works of Virginia.*

GENTLEMEN,

In pursuance of law, we, the president and directors of the Buchanan turnpike company, submit this our report concerning the said company's road to your honorable body.

The road has been worked upon its whole length, and was offered to the board by the contractor for reception on the 17th instant; but the superintendent having reported that there had been a departure from the location by the contractor at one place about fifty yards, and for a distance of about three hundred yards, making the grade at one place five degrees, and at another place seven degrees, when the law as also his contract stipulated that it should not exceed four and a half degrees, refused to receive the *whole* road until the above mentioned defects in the construction of the road had been remedied by the contractor.

Two sections of the road, of five miles each, had been completed and received, both by the board and the commissioners appointed by the county court of Botetourt, and the board have directed toll-gates to be erected thereon.

The remaining section of the road, which is about six miles as per the engineer's measurement, would now be received from the contractor but for the defects above alluded to, and which can be finished in a few days.

By reference to statements on the annexed page, marked A and B, you will see the condition of the finances of the company. It will be proper here to explain why the two shares of stock reported as unsold were not taken; they were in fact subscribed by another person for Dr. Kean, who thought he was authorized to subscribe for four shares, when the doctor insists that he had only authorized him to subscribe for two shares, and the mistake was not discovered until recently: the two shares can readily be sold.

We would further remark that there will be two toll-houses to build and pay for, which will cost each about three hundred dollars. The damages for land through which the road passes has yet to be assessed and paid for, as also the superintendent's account and some other small accounts.

By reference to statement C, on the annexed page, you will list of the stockholders as originally subscribed. Since th

Robinson has transferred his fifty shares of stock to Starkie Robinson, and he, Starkie Robinson, has transferred twelve shares to William W. Boyd, Esq.

We have not been able to get a map of the road. Mr. Kinney, who located the road, went off without furnishing the map, and promised to send it to us, which he has failed to do, and the contractor has mislaid the field notes, so that we cannot get the map now: we will procure it soon and send it to you.

The road is sixteen miles in length, as per the original survey. We propose to have two toll-gates, which we have this day ordered.

We have made no arrangements for keeping the road in repair: it is now in fine order.

The following is a list of the president and directors and other officers of the company:

John S. Wilson, president; W. W. Boyd, E. Valentine, P. A. Hatcher, state directors; Thomas Cartmill and John H. Hansbarger, directors; O. W. Kean, state proxy; W. H. Anthony, secretary; D. B. Layne, treasurer; Joel Lackland, superintendent.

William H. Anthony, secretary, has been allowed fifty dollars for his services to this date; Joel Lackland receives two dollars and fifty cents per diem: no other officer has yet been allowed anything for his services.

All of which is respectfully submitted.

JNO. S. WILSON, *Pres't.*

## [ A. ]

*Return of the state of the Buchanan Turnpike Company for the year ending  
18th November 1851.***Capital stock \$ 9,000:**

Subscribed by individuals 70 shares, at \$ 50 per share,	-	-	3,500 00
Not subscribed, by mistake, as explained in report, 2 shares, at \$ 50 per share,	-	-	100 00
Subscribed by commonwealth 108 shares, at \$ 50 per share,	-	-	5,400 00
Received from individual stockholders,	-	-	3,500 00
Two shares stock not yet taken,	-	-	100 00
Received of commonwealth,	-	-	2,737 50
Due from commonwealth,	-	-	2,662 50
			<u>\$ 9,000 00</u> <u>9,000 00</u>

## [ B. ]

*Statement of Receipts and Expenditures from Organization of Company.*

Amount received from individual stockholders,	-	-	3,500 00
Amount received from commonwealth,	-	-	2,737 50
Amount paid Starkie Robinson on his contract,	-	-	5,006 24
Do. do. for repairing road,	-	-	20 00
Expenses of engineering to date,	-	-	389 80
Amount paid David J. Wilson, damages allowed the heirs of Wm.	-	-	
Wilson, dec'd, for passing through their lands,	-	-	40 00
Cash on hand,	-	-	781 46
			<u>\$ 6,237 50</u> <u>6,237 50</u>

## GILES, FAYETTE AND KANAWHA TURNPIKE COMPANY.

*Return of the state of the Giles, Fayette and Kanawha Turnpike Company for the year ending 30th September 1851.*

Capital stock, \$59,950:			
Subscribed by individuals 1,198 shares, at \$25 each,	-	-	29,950 00
" commonwealth 1,200 shares, "	-	-	30,000 00
Tolls, rents, &c. from commencement of the work to date,	-	-	2,741 16
Nothing due by the company for money borrowed.			
No dividends.			
Amount of commonwealth's subscription unpaid,	-	1,508 40	
" individual subscriptions unpaid,	-	8,257 00	
Nothing due the company other than on account of stock.			
*Expenditure from commencement to 30th Sept. 1851,			
as per last year's report,	-	51,520 81	
Expenditure since that time in repairs,	-	581 16	
" " paying land damages,	-	60 00	
		<u>52,161 97</u>	
Amount in bank 30th Sept. 1851,	-	763 79	
		<u>\$62,691 16</u>	<u>62,691 16</u>

*Statement of Receipts and Disbursements within the year.*

Add receipts:			
No capital stock received within the year.			
Tolls received, after deducting 10 or 12½ per cent. for toll-gatherer,		641 16	
No other receipts during the year.			
	Total receipts,	<u>641 16</u>	<u>\$641 16</u>
Deduct disbursements during the year:			
For improvement and repairs of road,	-	581 16	
For land damages,	-	60 00	
	Total disbursements,	<u>641 16</u>	<u>\$641 16</u>

About 23 miles of the road yet unmade, the balance (say 100 miles) made and received. It is perhaps proper here to state that \$357 was received of the stock of John Bowyer, and the same paid over to Roland & Trench, contractors, who it appeared were entitled to it, as said stock had been transferred to them and reported as paid by last year's return. It is therefore not noticed in the above.

The list of stockholders, the amount paid or unpaid, has not been changed since last year. Nothing has been paid to the officers of the company during the year.

By order of the board of president and directors.

JOHN H. VAWTER, Sec'y.

\* The several heads of expenditure cannot be stated, not having the books and papers to refer to.

There does not appear to be any property belonging to the company.

## PATTERSON'S CREEK VALLEY TURNPIKE ROAD CO.

*Report of the President and Directors of the Patterson's Creek Valley Turnpike Road Company to the Board of Public Works and to the Stockholders.*

The company organized on the 23d day of November 1850. The location was completed about the 1st of February 1851, and the road put under contract on the 1st day of March 1851. By the first letting the whole road was to be finished by the 1st day of January 1852, but two of the contractors having failed to comply, two sections (say 10 miles) were necessarily relet. By the last letting the whole was to be finished by the 1st of March 1852, but it is now evident that one of the original contractors will not get through by that time. There are on the whole line about 34 miles made (some of it yet not well finished,) and about 3 $\frac{3}{4}$  miles to make. The contract prices vary on the different sections, but average about \$367 per mile for construction, to which is to be added damages paid to sundry persons for right of way, amounting to \$422 50, also cost of location, superintendence, printing and sundry other contingent expenses and repairs to the road, which will in all probably amount to \$800 or \$1000 more:

Say for construction—total,	-	-	-	-	13,855
Other items and charges,	-	-	-	-	1,172
					<hr/>
Total probable cost,	-	-	-	-	\$15,027

at the time the road will be finished and put under toll, which will leave a balance of \$1473 of capital to pay for lots, toll-houses, &c., (provided the stock is all paid.) As the inclement season of the year has set in, it is not probable that the road will be all made before the 1st of May or June 1852, by which time it may all be under toll; there are now 10 miles on the end next the railroad under toll; the receipts on it are more than were anticipated; but this line of road, the Moorefield and North Branch turnpike and the New Creek and Hardy turnpike, by other connections, all unite at the town of Petersburg in Hardy county, consequently they will to some extent be rival routes for the trade and travel south of that point to the Baltimore and Ohio railroad, though each may get the local travel of their own valleys.

The finances of the company per treasurer's report up to the 1st of December 1851, are as follows, to wit:

By amount received from stockholders,	-	-	5,100 00
By amount received from Board of public works,	-	-	6,955 87
			<hr/>
			12,055 87
To amount paid out to contractors and others,	-	-	9,661 01
			<hr/>
Balance in hands of treasurer,	-	-	<u>\$ 2,394 86</u>



Amount due from stockholders,	-	1,500 00	
Amount due from Board of public works,		2,944 13	
		<hr/>	\$ 4,444 13

The present officers of the company are Thomas Carskadon, president; Joseph McNemar, James Allen and Charles Williams, state directors; James Williams and John T. Pearce, directors on the part of private stockholders; Samuel D. Brady, treasurer; Nathaniel Kuykendall, superintendent and clerk, salary \$ 200 per annum; Washington Adams, toll-gate keeper, salary 10 per cent. and \$12 per annum for house rent.

N. KUYKENDALL, *Clerk.*

December 20, 1851.

Accompanying the above is a list of stockholders. An apology is due for neglect in not forwarding a report in October; the officers were not fully apprised of their duty, and the printed circular was not received in time; it was directed to Patterson's creek depot, instead of Romney or Sheetz's Mills. Please direct in future to Sheetz's Mills, Hampshire county.

N. K.

## TURNPIKE COMPANY.

WILE, Dec. 5th, 1851.

was appointed commissioner for  
president of the Raleigh and  
Gibboney who had resigned,

on the 6th of February last; J. J.  
salary of three dollars per day, and an

the direction of the line of North Caro-  
under contract and are in the course of  
four hundred and twenty-five dollars  
ville and in the direction of Raleigh, the  
at 24 miles, is under contract at an aver-  
and sixty-four dollars per mile.

general assembly, Tazewell county has taken  
ity; the road will pass through the former  
which are under contract, averaging \$399 per

out thirty-four miles in Mercer county, twenty-two  
made at an average of \$327 per mile.

re will be about twelve miles.

ity has recently complied with the act of assembly  
construction of this road, and if the nearest point of  
olina line south of the new courthouse be made the ter-  
n meets the approbation of this board, only twenty miles  
ayson will be necessary to reach the southern terminus,  
the entire length of the road about one hundred and twen-  
miles. The road has so far, for the most part, been let  
sections of one and two miles, the greater part in mile sec-  
and bids deemed too high have been by the directory uniformly  
ed, and the engineer authorized to contract when more favor-  
propositions should be made, saving in some instances fifty dol-  
per mile. It is presumed all the road now under contract will  
ished during the next year, when the remainder will be adver-  
for contract.

spectfully submitted.

CHARLES L. CROCKETT, *Pres.*

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# PIKE COMPANY.

and Fairmont turnpike  
the progress and condi-  
1851.

road has been completed.  
are being received along the  
are found sufficient to keep  
— applied to that purpose in such  
for the interest of all con-  
good repair.

is kept in as good order from the  
over which the road passes and the

to exercise that economy in the  
company which they thought most  
re state and of the stockholders and  
by the improvement.

Teste,

THOS. L. MOORE,  
*Secretary.*

*Return of the state of the Weston and Fairmont Turnpike Company, for the year ending the 30th of September 1851.*

**Capital stock, \$20,000:**

Subscribed by individuals 320 shares, at \$25 each,	-	8,000 00	
Subscribed by commonwealth 480 shares, at \$25 each,	-	12,000 00	
Tolls from commencement of work to date,	-	634 96	
Amount of commonwealth's subscription unpaid,	-	150 00	
Amount of individual subscription unpaid,	-	96 70	
Amount expended in construction of work from commencement of work in 1848 to date, including officers' salaries, &c.	-	19,079 74	
Amount expended in repairs, during same time,	-	1,055 25	
Amount expended in land damages,	-	222 66	
Cash on hand, as per statement below,	-	30 61	
		<u>\$ 20,634 96</u>	<u>20,634 96</u>

***Receipts and Disbursements.***

Balance on hand, as per last annual report,	-	91 66	
Receipts during the year, viz:			
For capital stock of individuals,	-	1,767 42	
For capital stock from Board of public works,	-	2,850 00	
For tolls,	-	634 96	
		<u>5,344 04</u>	
Disbursements:			
For improvements,	-	3,706 14	
For repairs,	-	1,051 13	
For damages,	-	186 66	
For officers' salaries:			
For treasurer,	-	125 00	
For superintendent,	-	40 00	
For engineer,	-	204 50	
		<u>5,313 43</u>	
Balance on hand,	-	<u>\$ 30 61</u>	

By order of the board.

Teste,

THOS. L. MOORE,  
Secretary.

*A List of the President and Directors, Secretary, Treasurer and Superintendent of the Weston and Fairmont Turnpike Company, with the salary or compensation allowed to such.*

Gideon D. Camden, president; Eugenius L. Boydston, Benjamin Bassil, jr., Solomon S. Fleming, Blackwell Jackson, John J. Moore, gentlemen, directors; Thomas L. Moore, secretary—\$ 25 per annum; Thomas G. Watson, treasurer—2½ per cent. commission; Benjamin Bassell, jr., superintendent—\$ 5 per month; Solomon S. Fleming, superintendent—\$ 5 per month.

By order of the board.

Teste,

THOMAS L. MOORE, *Sec'y.*

## STATE IMPROVEMENTS.

## STAUNTON AND PARKERSBURG ROAD.

*Annual Report of R. H. Kinney, Superintendent.*

To the Board of Public Works of Va., Richmond.

GENTLEMEN,

I was appointed general superintendent of this improvement by order of your board of 6th April 1851 ; I therefore present this report from that date. The first subject will be the

## REPAIRS.

As soon as practicable I passed over the line of the road, in order to get the spring repairs under contract at the earliest possible moment after the snow and frost had left the ground, and endeavored at once to commence *a system*, so that they should be permanent, looking forward for the system to be carried out for several years. Time pressing, I adopted two plans. One by letting out the work in sections, and the other by working entirely on state account with tools already belonging to the state.

After a fair trial, to the first of these plans I give my decided preference, partly for reasons such as the following:

1. All property belonging to the state, in the hands of individuals, is liable to be lost or worn out by private use or neglect.

2. All work done by hands directly employed by the state requires a multiplication of accounts, and opens the door to frauds, small but innumerable.

3. The superintendent has the control of the road more under his immediate eye than by having different gangs of hands scattered over a long extent of road ; and where any casual repair is needed at any other time than when the full repairs are put on, he would be very often at a loss to get hands immediately, while on the other hand he could simply notify the contractor that his portion of the road needed repairs at a given point, and require his immediate attention to it.

I am satisfied that all the road will be taken in from 10 to 20 mile sections by responsible persons living on or near the line, and a superintendent, who will require them to do their work promptly and faithfully, will never be at a loss to get his road well kept up, especially if the plan is adopted (which I will do) of having *printed specifications*, signed by himself and the contractor, setting forth the *manner, time and*

payment of how his work is to be done, and a steadfast refusal on his part to pay for work which is not done accordingly.

The average cost of repairs for 12 months from 1st April to 1st next March, will be, as far as I can ascertain, about \$10 50 per mile, exclusive of building small bridges, clearing the road of fallen timber, &c.

#### BRIDGES.

There are about 25 bridges on this road of 50 feet span and over, and about 30 under 50 feet span—in all about 55. Of these I have had Fink run bridge, about 80 feet span, Indian creek, about the same span, and several small ones, repaired; and Dry run, 108 feet span, Lazure's run, 32 feet span, and Lazy run, 132 feet span, built new entirely, from unexpended funds for bridge purposes under the control of the board. These bridges are all complete by this time, (Dec. 7,) and the travel passing over them; and also a bridge over Buffalo branch, about 20 feet span, entirely rebuilt and finished one month ago; this, however, will be paid for out of the tolls on hand, as well as the others now building of small span, also to be paid for out of funds arising from tolls.

By the first of next October I hope to have every bridge on the line in perfect order, and the *small* ones mostly built entirely new, which now require it so badly.

The new bridge to be built over Middle river I have advertised to be put under contract on the 1st of January next. This would have been let long ago, but owing to the great scarcity of lumber, by reason of low water, there was no chance for enough competition in the bidding: I accordingly postponed letting it as above.

Whilst on the subject of bridges I most urgently recommend that the board press the subject of a bridge across Tygart's valley river, above Beverly, on the consideration of the legislature, and ask an appropriation for building the same. This matter was spoken of in my predecessor's report and also urged.

I had a personal chance of seeing and experiencing the great inconvenience, occasioned by there being no bridge, a fortnight ago. The stages *must* be stopped at that point very often during the winter season; if not with high water, ice will often prevent any other than a perilous and uncertain travel for stages, passengers, travelers in vehicles, and the mails; and besides, a large amount of tolls is lost by being compelled to take an out of the way track, impassable for any but horseback travel, as I am informed and believe.

This bridge is more important now than ever heretofore, on account of the completion of the Fairmont and Beverly and the Buchanan and Clarksburg roads, both of which are feeders to the Staunton and Parkersburg road; and last, but not least, it is *the only stream of consequence* between the two ends of the road not now handsomely and permanently bridged. The ford is wide, and when up a considerable current exists, which, even when clear of ice, would deter a stranger from attempting it at a very ordinary stage. My own opinion is that it should have been the first bridge built over Tygart's valley river.

## MACADAMIZING.

I have given great attention to this part of the improvement of the road ; and by reference to the list of bids, the board will see that the work has gone far below its rate of being done, though prices of provisions, &c. are greatly higher. There remain at this date (Dec. 7) about \$5,000 more of the last appropriation to spend, which I wish to use very cautiously in macadamizing all the short, bad places that I may detect this winter and next spring, when the road gets at its worst. With this partly in view I have just passed carefully over the line, but finding great quantities of snow it was impossible for me to decide at present. I have, however, had quite a large proportion expended on Cheat mountain, and will spend more of it there. Nearly the whole of this great bugbear to travelers will then be *good road*, winter and summer, except when blocked up with snow and ice, which must be the case sometimes.

Two lettings of macadamizing have been had—one at Weston and Monterey on the 19th and 20th June last ; the contracts under this letting are nearly or quite completed, except the two largest. The winter coming on prematurely, I would not allow the metal to be spread on these sections, though a great deal is delivered and broken on both sections. The contractors on all these sections have discharged their part of the contracts to my satisfaction thoroughly in all cases where I have received part or the whole of their work, and drawn on the board for the amounts due them.

The result of the other letting at Parkersburg on 15th October last is now before the board for its action.

I have had some graveling done with materials from the beds of the streams on the western end of the road, which is very far superior to any macadamizing except that done with limestone ; and if it wears as well as I anticipate, I would give it the preference—cost taken into consideration—even to that as a covering, being ready for use and smooth almost as soon as laid down.

I received the circular of the board in regard to using *earth* of any kind as a covering for macadamizing.

My views in relation to that matter having always been so decidedly in accordance with the circular, it is almost useless for me to say that nothing of the sort has been done on this work, nor will be done whilst I am superintendent and responsible for it.

The only draft drawn by me prior to the 1st of October last on the macadamizing fund was in favor of Perry Lorentz, for the sum of \$452 52, balance due on a contract of the year before and unfinished ; the whole of his contract being for \$491 20, and Colonel Hamilton having given a previous draft for \$238 68, according to a statement furnished by Lorentz from Col. Hamilton.

## GENERAL REMARKS.

The first extra expenditure out of the increasing receipts from tolls I should recommend to be expended (after building new bridges where



the old ones have rotted or are becoming unsafe,) in having the timber cleared at least 30 feet on each side of the road.

In my last two trips over the line since 30th September an extensive fire on the Alleghany mountains (not an uncommon thing in the fall of the year,) during my return from the first trip, had caused no less than 14 trees to fall in the road on that mountain alone, having had the pleasure of helping to get them out so that we could pass and find some one to clear the road more effectually of them; on the last trip, returning, the snow had caused almost as many more on the same space—to say nothing of other advantages which would accrue, equally, if not more important, such as laying open the road to the free use of wind and sun.

Mr. Prince, the very efficient gate-keeper at No. 12, (Parkersburg,) having removed, I have appointed Mrs. Vaughn, an old gate-keeper, who was best recommended, and I found on enquiry most agreeable to the neighborhood. Some proposition was on foot to get the N. W. turnpike gate and the gate for this road put into one person's hands, and was favored by Col. Wilson, the superintendent, but for reasons not necessary to mention, but obvious, I think, I prefer keeping each gate by itself. One thing alone I would mention—the difficulty that might arise in the annual tolls; and besides, I believe the experiment has been tried before. It throws too much money into one individual's hands. Mrs. Vaughn has given the necessary bond and takes the usual oaths.

I recommend the sale of the toll-house, not now in use nor ever likely to be again, about twenty-four miles east of Parkersburg; it yields no rent and is going to decay.

I also recommend the sale of toll-house No. 5, west base of Cheat mountain, and the removal of the gate lower down Tygart's valley. For the present it might be kept at Bemorth's store, until the completion of the Huttonsville and Huntersville road, when it might be removed to Hamilton's store, or a lot of land condemned and a house built, which would answer for both roads. I am satisfied that a great deal of toll is lost coming from the upper end of Tygart's valley towards Beverly, Fairmont, &c., and *vice versa*.

About the first of March I shall, unless otherwise instructed, sell all or nearly all the tools belonging to the state and let the work out for repairs in 10 mile sections for 12 months from that date.

I would ask that some arrangement be made, so that an annual toll may be assessed, over the usual yearly tolls, on the bridges at Weston, Buchanan and Beverly. The bridges at those places being greatly used by the immediate towns and neighborhoods near them, ought of course to pay more toll than ordinary travelers.

I recommend that wagons of 4 inch tire wide or upwards, be passed toll free; that ordinary tires, with patent locks, remain as at present, and that those without patent locks be increased at least 50 per cent. I also recommend that the toll on cattle be put up to where it was before. 20 head of cattle passing over the road just after fall repairs are put on, are more destructive than 10 wagons, and do not pay one-tenth as much. This only holds good on this road, where there is so much side cut—the edges of the road are entirely cut off

and the ditches filled by their sharp hoofs when it is too late in the season to repair again.

It is gratifying for me to state to the board, as will be seen by the returns of tolls and superintendent's account, that there has been a large increase of tolls over disbursements for the last two quarters ending June 30 and September 30, though the returns shew a decrease of tolls in the fiscal year of \$ 66 48; but from this sum must be deducted the amount of tolls due by old mail contractors from 1st of April to the time when the stages were put on by the *stage contractors*, which has not yet been collected because I have not yet ascertained the amount due. The present contract with Harman & Co. is \$ 500 per annum, and if the tolls even remain as they are, I do not see why the road should not pay a small dividend next year, if no extraordinary expense is encountered.

The stage toll, as per contract with the board, is \$ 500 per annum, out of which I believed the toll-keepers were entitled to three per cent., and I have accordingly allowed it to them.

I have no data at hand to shew the relative pecuniary situation of the road this year and last year, not knowing what amount was due to or from the former superintendent at the date of my appointment.

I would remark that of the amount appearing on quarter's return of 30th September as being in my hands, a large portion of the same was retained until some contractors had done their fall repairs more satisfactorily; what has not since then been paid out will still be passed on to each quarter, until I am satisfied with their work: other portions have been paid out for other purposes all of which will of course appear at next quarter. I make this statement, so that you may not think that the sum appearing against me is actual gain, although I hope, as before stated, to shew some such balances as clear profit.

Several claims have been presented, which I have up to this time declined paying: one (the largest) to Mr. John Hanneman, for building a bridge near his house, of about 25 feet span: he claims \$ 49 39; the price is reasonable and the work faithfully done, and Col. Hamilton says the claim is just; I shall therefore pay it, unless otherwise instructed, believing it to be correct myself; and so with the others.

The accompanying statement shews the quarter's tolls for 1851 and 1852. I annex the stage tolls received in last two quarters by myself, shewing a total nett increase up to September 30, 1851, of \$

No other fund being used prior to 30th September last, except the draft in favor of Lorentz, there is no other annual account to offer at this time of the macadamizing or the bridge fund. In regard to the bridge fund, it being little over \$ 800, I would say that what will be wanting to build the bridge over Middle river, after payment for the three bridges at the western end of the road, I expect to make up from the tolls; as it will be built by contract, the board of course will see the whole arrangement, before approving the contract. I am anxious to get it done before the next summer's travel comes on.

Respectfully submitted.

R. H. KINNEY,  
*Superintendent S. & P. Road.*

*December 7th, 1851.*

*Statement of Tolls received on the Staunton and Parkersburg Road during the years 1849, 1850 and 1851.*

				Tolls received in year 1849-'50.	Tolls received in year ending 1851.
In first quarter,	.	-	-	1,319 81	1,212 97
In second quarter,	-	-	-	595 42	623 97
In third quarter,	-	-	-	1,041 74	905 82
In fourth quarter,	-	-	-	1,215 23	1,362 96
				\$4,172 20	4,105 72
Decrease in 1850, 1851,				-	\$ 66 48

NOTE.—I had charge of the disbursements of the last two quarters, and there is a surplus fund on hand, whereas at a corresponding time last year, 30th September 1851, there was a balance due from the road of \$250. To offset the \$66 48, shewn above as decrease in tolls, I would say that a portion of old mail contractors toll due and not collected, will probably cover the difference when collected. There is still however an increase on the last two quarters over same quarters last year of \$11 81.

Respectfully submitted.

R. H. K., Superintendent.

# CLARKSBURG AND BUCKHANNON TURNPIKE COMPANY

*Return of the state of the Clarksburg and Buckhannon Turnpike Company for  
the year ending 30th September 1851.*

Capital stock \$ 20,000 :			
Subscribed by individuals 171 shares, at \$ 25 each,	-	-	4,275 00
" Harrison county court 40 shares, at \$ 25 each,	-	-	1,000 00
" Lewis " 30 " "	-	-	750 00
" Commonwealth, 360 " "	-	-	9,000 00
Tolls collected up to this date,	-	-	402 07
Indebtedness to company beyond the stock taken,	-	-	334 67
Amount of commonwealth's subscription unpaid,	-	132 37	
" individual " "	-	113 00	
Expended in construction,	-	13,567 97	
Incidental expenses, as per last report,	-	1,042 28	
" " not reported in last return,	-	89 48	
" " paid out during last year,	-	154 00	
Expended in repairs this year,	-	662 64	
		<u>\$ 15,761 74</u>	<u>15,761 74</u>
Amount of capital stock received from individuals this year,		61 73	
" " " commonwealth this year,		99 86	
Tolls received this year,	-	402 07	
		<u>          </u>	<u>\$ 563 66</u>
Disbursements this year:			
Amount paid John H. Shettleworth,	-	117 84	
" D. S. Pennell,	-	43 75	
" for repairs,	-	402 07	
		<u>          </u>	<u>\$ 563 66</u>
The company's entire indebtedness will appear by exhibit marked A,			
by which the amount due is shewn to be	-	-	612 78
The amount of commonwealth's stock unpaid is	-	132 37	
" individual " "	-	113 00	
Balance due from commonwealth on certificate of Oct. 1850,		4 50	
" " " Dec. 1850,		20 37	
" " " Jan. 1851,		7 87	
		<u>          </u>	<u>278 11</u>
Leaving this sum due from company over stock taken,			<u>\$ 334 67</u>

There may be some errors in the foregoing statement. The investigation of the affairs of the company has been attended with much difficulty and a great deal of labor, owing to a want of proper understanding of the accounts as furnished to the present secretary. For this cause there has been considerable delay in making out this report.

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*List of Officers of the Company.*

Edward Stewart, state director, president; Burton Despard, state director; one vacancy; John Hursey, Augustine J. Smith, directors elected by the stockholders; James P. Bartlett, superintendent; P. Chapin, treasurer and clerk.

The president and directors are allowed \$2 per day each for every day they are actually engaged in the business of the company. The superintendent is allowed \$100 per annum; the clerk and treasurer is allowed \$30 per annum.

For the last year there has been no proxy for the state appointed. A meeting was called in October to elect directors, &c. for the year 1852; there being not a majority present, no election was had. Another meeting is called, to be held on the 3d Monday in January 1852.

A list of stockholders accompanies this report. The road is completed and is thought to be in pretty good order.

All which is respectfully submitted.

E. STEWART, *Pres.*

Attest,

P. CHAPIN, *Clerk.*

*Liabilities of the Company to Individuals.*

Due	Lair Dean,	-	-	-	-	-	55 00
	Mrs. Haymond,	-	-	-	-	-	21 75
	D. S. Haselden,	-	-	-	-	-	8 24
	E. S. Stealy,	-	-	-	-	-	22 36
	E. Stewart,	-	-	-	-	-	12 89
	Ab'm Rigar,	-	-	-	-	-	53 00
	George Harper,	-	-	-	-	-	10 00
	Isaac Martin,	-	-	-	-	-	14 47
	P. Chapin, treasurer,	-	-	-	-	-	30 00
	Jas. P. Bartlett, superintendent,	-	-	-	-	-	100 00
	J. Hursey,	-	-	-	-	-	11 50
	B. Despard,	-	-	-	-	-	6 00
	A. G. Smith,	-	-	-	-	-	4 00
	Stewart Little,	-	-	-	-	-	2 00
							<hr/> 852 21
	Balance due for repairs,						260 57
							<hr/> <hr/> \$ 612 78

Attest,

P. CHAPIN, *Clerk*  
C. and B. T. Co.

## LEESBURG AND SNICKER'S GAP TURNPIKE COMPANY.

MAPLE GROVE, Dec. 31, 1851.

*To J. BROWN, Second Auditor.*

SIR,

Enclosed I send you a report of the Leesburg and Snicker's gap turnpike company from October 1, 1850, to October 1, 1851.

JONAH HATCHER

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The president and directors of the Leesburg and Snicker's gap turnpike company beg leave to make the subjoined report on the condition of the affairs of the company.

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*Return of the state of the Leesburg and Snicker's Gap Turnpike Company*

Amount of commonwealth's subscription unpaid,	-	-	3,009 65
"    individual                    "            "	-	-	4,012 87
Expended in the construction of the work from commencement, in damages, repairs, salaries, incidental expenses, interest and discount on bank debt, up to 1st of October 1850,	-	-	70,856 42
Expended in repairs from 1st Oct. 1850 to 1st Oct. 1851,	-	-	743 97
"    salaries, 2 gate keepers 1 year,	-	160 00	
President's salary,	1	75 00	
Treasurer's salary,	1	25 00	
Five directors' salaries,	1	50 00	
		-	310 00
Amount applied to bank debt, as per former report,	-	-	3,606 37
"    "    "    "    from 1st Oct. 1850 to 1st Oct. 1851,	-	-	598 00
"    of per centage paid for collecting money, as per former report,	-	-	10 66
Balance in hands of S. M. Edwards, former treasurer,	-	-	147 47
"    "    of J. H. Chamblin, treasurer,	-	-	13 08
			<u>\$ 83,314 49</u>

*from Commencement, April 1831, till 1st of October 1851.*

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Capital stock \$ 50,000 :			
Subscribed by individuals,	300 shares at \$100 each,	-	30,000 00
"	commonwealth, 200 " " "	-	20,000 00
Amount of tolls received from commencement,		-	18,960 43
"	of interest received from individual stockholders, as per former re-		
port,		-	547 39
Amount borrowed of office of discount and deposit at Leesburg,		-	13,800 67

\$ 83.314 49

Jan. 1850, and the 1st Oct. 1851.

743	97
310	00
598	00
13	08
<hr/>	
\$	1,665 05

October 1, 1850, - - 60 39

nothing.

1,604 45

**\$ 1,655 05**

**JONAH HATCHER,**  
*Pres. L. & S. G. T. Co.*

## NEW CREEK AND HARDY TURNPIKE COMPANY.

RIDGEVILLE, December 30th, 1851.

*To the Board of Public Works.*

GENTLEMEN,

Enclosed you will receive the report of the president and directors of the N. C. & H. T. Co. Although it was not made at the proper time, in accordance with the law and your letter of instruction, I presume it will otherwise be more satisfactory. The condition of the work, connected with other circumstances, made it out of my power to draw up a report at the time directed by your circular; (and in fact the circular was not received until the 4th Nov.) In future I hope the road will be so managed that the reports will be forwarded at the proper time.

Respectfully, yours, &amp;c.

N. KUYKENDALL,  
Clerk N. C. & H. T. Co.

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*Report of the President and Directors of the New Creek and Hardy Turnpike Company to the Board of Public Works and Stockholders.*

The company organized in February 1851; the road was located and put under contract in April 1851. By contract it should have been all finished by the present time, but the winter setting in so early has prevented some of the contractors from finishing up their work. Though the principal part of the work is done, and all could be completed in a short time if the weather was favorable, as the season now is, it may not all be completed until spring, when it can all be put under toll.

The length of the road is a fraction over 18 miles; the width from 16 to 18 feet, the greater part 18 feet wide, and the average cost for construction about \$ 373 per mile.

Say, total cost for construction,	-	-	-	6,725 25
Damages for right of way,	-	-	-	516 00
Cost of location, &c.	-	-	-	69 25
Superintendence for 1 year,	-	-	-	100 00
Sundry other contingent expenses, printing and other bills,				50 00
Repairs, mile posts, &c.	-	-	-	100 00

Total probable cost,	-	-	-	-	<u>\$ 7,560 50</u>
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Up to the time the road is finished and put under toll.

to solvent stock that will be		
to	-	3,500 00
to	-	5,250 00
	-	<u>\$ 8,750 00</u>

to pay \$1200 to buy lots and build toll-  
road (paid as above estimated.)

when finished, if it should not nett a sur-  
plus for maintenance and keeping it in repair. It  
will be a great benefit and comfort to the citizens and traveling  
to the improvement of the country through  
the nearest route to the Baltimore and Ohio  
western part of Hardy and Pendleton counties.  
The state of the finances as follows:

to stockholders to this date,	-	2,567 33
Board of public works,	-	3,251 63
		<u>5,848 95</u>

to contractors,	-	3,488 00
of way,	-	516 00
	-	69 25
quarters,	-	50 00
	-	12 00
		<u>4,135 25</u>

to Treasury,	-	<u>\$ 1,713 70</u>
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The officers of the company are Reuben Davis, president;  
John Ward, Robert K. Sheetz, state directors;  
John Michael, directors on part of stockholders; Silas  
Kuykendall, superintendent and clerk—  
superintendent and clerk per annum \$ 100.

N. KUYKENDALL, Clerk.

Nov 27th, 1831.

[ Doc. No. 18.]

# REPORT

OF

CHARLES B. SHAW, C. E.

ON THE

PREFERRED LINE IN THE SURVEYS

FOR A

RAILROAD FROM COVINGTON TO THE OHIO.

1852.

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## REPORT.

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*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

I present to you a brief notice of the various surveys and reconnoissances made during the past season for the Covington and Ohio railroad, as a preface to a report on the preferred line.

In a future communication the reasons of that preference shall be expressed more in detail.

To expedite the work two parties were employed; and that no interruption to their operations might arise from the appearance of cholera near the Ohio river, surveys were begun at points not very far from it, and were subsequently connected with the main line from Covington to the mouth of Greenbrier.

Commencing at the Narrow falls of New river,  $1\frac{1}{2}$  miles above the mouth of Gauley, Mr. McKean's party surveyed Kanawha on the north side through the Salines, Charleston and Buffalo, to Point Pleasant, returning on the south bank of the river to the Narrow falls. This party subsequently surveyed from the mouth of Indian creek up New river to the mouth of Big Stony, and afterwards up Bluestone river, and by one of its branches, to a depression on the Great Flat-top mountain on the head waters of Guyandotte river.

The same party then resumed last year's line at the mouth of Greenbrier, and keeping on the north bank, descended New river to the Narrow falls, forming a continuous line from Covington to Point Pleasant. A line was also run by this party from New river, up Piney creek and White Stake creek, to the neighborhood of Raleigh courthouse, to ascertain the possibility of reaching the Northeast fork of Coal river.

The second party, in charge of Mr. Halkett, commencing at the mouth of Pigeon creek, surveyed down Big Sandy river to its mouth, and thence up the Ohio to Guyandotte; up Guyandotte and Mud rivers, and through the old Teay's valley, to the mouth of Scary creek, forming a connection at that point with the line on the south bank of Kanawha.

Removing then to Covington, this party surveyed thence up Potts' creek, and down Big Stony creek to its mouth; crossed New river, and ascending East river, pursued the route indicated in Governor Floyd's message, crossing East river mountain, and ascending Bluestone to



its head; and touching the head waters of Clinch river, deflected to the right, passing through an almost imperceptible depression in the Flat-top near the Tazewell springs, thus reaching the Dry fork of Sandy.

The latter stream and the Tug fork were surveyed to the main river, and thence the survey pursued the river to the mouth of Pigeon creek.

This connection presented a second continuous line from Covington to the Ohio.

On its return to winter quarters, this party made a brief examination from the head of Clinch, by way of the Clear fork of Wolf creek; thence on to Kimberling creek; thence descending Walker's creek to the junction with Little Walker, and from the forks of Walker's creek, through a remarkable saddle in the Brush mountain, to a point on New river below the Horseshoe.

It was designed to connect this line with one from the mouth of Big Stony creek to the line of the Virginia and Tennessee railroad, near Christiansburg, with the purpose of estimating the value of that connection; but that survey having been made by that company, all necessary facts can be obtained from them.

Mr. McKean's party terminated its operations by a survey from the mouth of Angling's creek to the forks of Meadow and Gauley rivers, at which point exist the main difficulties of the Meadow river line. This line was reconnoitered by myself from Greenbrier bridge to the forks. Hughes' creek, a tributary of Kanawha, heading in Little Gauley mountain, was also examined in connection with a projected route by Summersville, but found impracticable.

Numerous other reconnoissances were made, but with no profitable result, in the hope of finding some practicable way by the heads of Coal or Guyandotte rivers.

The comparison was gradually restricted to three routes: the main New river route, the Big Sandy route, and the Meadow river route. The most decided advantages exist in favor of the first named. The reasons for rejecting the last two may here be expressed in a few words:

The Big Sandy route is more than 40 miles the longest, even in measured distance. It crosses two additional summits, each higher than the main Alleghany. It would require frequent and expensive crossings of Big Sandy. It approaches too nearly the Virginia and Tennessee road, invading its province as it were, affording unnecessary accommodation in one quarter, and creating a dearth of it in the entire central region of the state, in which are located and distributed those health-giving fountains, "the Virginia Springs." The easy and speedy approach to them is a matter of solicitude and concern to the people not only of the *Southern* and *Western*, but also of the *Northern* and *Eastern states*—a consideration that will attract and secure the attention of capitalists to its stock, both North and South, as the incalculable travel over this line in pursuit of health and pleasure, will tend to cheapen the rates of tonnage below the average rates of railroad charges.

The Meadow river route was rejected because of the necessity, first, of crossing Meadow mountain, thus rising unnecessarily 900 feet after reaching the Greenbrier river, whence an uninterrupted descent is practicable. And lastly, from the utter impracticability of adjusting curves of suitable radius to the ground between Meadow and Gauley rivers. This route had been confidently claimed as being 30 miles shorter than the line down New river. So far from this being the case, it is, at the most favorable estimate, longer even in measured distance. Both of the rejected routes have advantages certainly, which shall be duly stated hereafter, but they are greatly overbalanced by inferiority of grade.

Unusual efforts were made to avoid the supposed great difficulties of New river; but had the facts now in possession been fully known, no anxiety would have been entertained, to find a substitute for what I do not fear to proclaim a line of unequalled excellence in grade, and but moderately difficult of execution.

The valley of New river being much of it without even a continuous horsepath below the mouth of Lick creek, is somewhat difficult of access, and must be visited at particular points, or reconnoitered on foot. Having only visited particular points myself, I requested Mr. McKean to commit his own remarks to paper, and here insert them. As they are the notes of one who has trodden every foot of this much misrepresented way, and of one moreover, I feel called upon to say, who has evinced the highest professional skill and judgment in his operations, they ought to be considered as the most reliable authority for the true character of the ground.

CHARLOTTESVILLE, Dec. 22, 1851.

DEAR SIR,

Agreeably to your request, I present you the substance of my notes on the "character of the line along New river from the mouth of Greenbrier to that of Gauley river, the only portion of my main lines of survey for the past season of which you were not able to make a full personal examination."

The general character of this portion of the valley of New river, and of the difficulties to be encountered in constructing a railroad along its bank, is briefly and accurately stated by Mr. Charles Ellett, jun. in his report as chief engineer of the James river and Kanawha company, on the surveys made in 1838, extracts from which are given in your own report of last February.

The upper division, 42 miles long, from the mouth of Greenbrier to Bowyer's ferry, presents obstacles similar to those encountered along Greenbrier river, and not much greater. The strips of bottom land are fewer and narrower, and the slope of the hill side is often steep. But it is only at a few points that a vertical cliff of rock comes to the edge of the river. This occurs at Richmond's falls (10 miles below the mouth of Greenbrier) and at a point 4 or 5 miles below Bowyer's ferry. With ample allowance for rock excavation at these and other

points, and for the greater amount of supporting wall required, the average cost of the road formation on this division will not exceed that on the Greenbrier division by more than \$4000 per mile.

A tunnel, 1600 feet long, through sandstone, at the narrowest part of "Stretcher's Neck," will save a distance of 2.89 miles.

On the lower division of the New river, from Bowyer's ferry to the Narrow falls, a distance of about 18 miles, greater difficulties present themselves; but they cannot, on a comparison of this with other great railroad lines, be regarded as formidable. Indeed, for five-sixths of the distance, the hill side work is similar to that of the upper division. More rock cutting is required, and more walling; but the average cost of the road formation, for 15 miles of the lower division, will be but \$16,500, or (exclusive of the tunnel there) about \$5500 per mile more than on the upper division.

For three miles of this division, however, commencing 2 miles below the "Hawk's Nest," the cliffs project in many places to the very edge of the river. Here much rock cutting and walling will be required, and one tunnel (through a point of cliff) 600 feet long.

The projecting cliffs are generally from 60 to 150 feet high, rarely if ever exceeding 200 feet. The Hawk's Nest is 520 feet above the river, but the face of that cliff is 300 feet from the line. Full allowance is made in the estimates for heavy work on this portion of the line. The road bed formation for these three miles has been estimated to cost \$62,000 per mile, exclusive of the tunnel, or \$76,000, including it.

Along the whole New river line stone of good quality for walling and other masonry is at hand. Of locust timber for ties, there is an abundant supply.

The line occupies the north bank of the river, and thus appears to be entirely free from land slips, which sometimes occur on the south bank. Of recent falling of masses of rock, I noticed but one instance. About two miles above Bowyer's ferry, a portion of the cliff which tops the hill side slope, had detached itself and fallen in 1849. This, it was stated by the owner of the next farm, was the only instance he had known for thirty years. The fragments of rock remain mostly at the foot of the cliff, and but one of them had rolled down as far as the line.

The extreme rise of the water of New river above low water mark in the highest freshets, as measured at Miller's ferry, just above the Hawk's Nest, is thirty-one feet, a difference of level somewhat exceeding that observed at any other point.

Respectfully,

HENRY S. McKEAN.

The great lack of information, which has for so many years been felt in regard to the character of the New river between Greenbrier and Gauley, arises from the fact that since the abandonment of the lumber business which was formerly carried on there, the entire valley between those points has seldom been trodden, except by engineer

parties or surveyors. The same hostility to the improvement and a wish to defeat the work by magnifying the obstacles, were not expressed at the time of Mr. Ellett's survey, or he would doubtless have insisted, even more strongly, that the construction would not present more than ordinary difficulty.

Of the two lines surveyed from Gauley to Point Pleasant, that on the south bank is preferred, for the following reasons:

The north bank is occupied by the Kanawha turnpike, and much difficulty and expense would be encountered in a conjoint location.

Notwithstanding all possible pains taken to avoid unnecessary damage, a line could not be run, without an entire condemnation of some of the salt establishments at the Salines, and with great inconvenience to many others.

The north side tributaries are more numerous, wider and more expensive to cross.

The selection of the north side would render it necessary to construct a bridge of great length and great height across Kanawha at the Big Sandy branch, with at least two draws for the accommodation of steamboats; whereas the south side line will cross New river at the Narrow falls entirely above navigation, at a point exceedingly favorable for a bridge of but moderate height and length, and on the most solid foundation.

If it should be determined to construct this road to Point Pleasant, without regard to the Sandy branch, it might be necessary to modify this opinion, as the accommodation of the towns of Charleston, Putnam, Buffalo and Point Pleasant, (all on the north side,) might authorize greater expense in construction, or the payment of the unavoidable damage to the Salines. An estimate is now in progress of the cost of such a line. It will be based on the consideration, that no damages will have to be paid to the James river and Kanawha company for the contraction at some points of their turnpike.

On the south side the line is also in occasional conflict with a turnpike—the Giles, Fayette and Kanawha turnpike. As this road is not a great thoroughfare, and somewhat embarrassed in its finances, it might be purchased from the Great falls to Charleston. The same arrangement might be made also perhaps with the Kanawha turnpike, as it is evident that very little use is ever made of a road like either of those roads when in juxtaposition with a railway.

Feeling convinced of the propriety of a branch to the mouth of Sandy to meet the Louisville, Lexington and Frankfort extension to that point, I have no hesitation in selecting the line on the south side of Kanawha for the main theme of the present report.

In the selection of a terminus for the Covington and Ohio road, regard must chiefly be had to the consideration of revenue. It is true, no doubt, that during a portion of almost every year, navigation is much interrupted between Point Pleasant and Guyandotte, and that if the only question were with regard to the tonnage traffic, the terminus should be Big Sandy; still as the main support of this road will be, as in all long railways, its passenger traffic that terminus ought to be chosen which would most certainly it. If it become

necessary to sacrifice one of the termini proposed for this road, I am convinced, after reflecting long on the subject, that it should be the one to Sandy.

I nevertheless consider the Kentucky connection so important, and that it can, as will be seen, be effected at so little cost, that I would recommend it to be constructed, or that steps be taken for that purpose whenever it shall appear that our neighbors of Kentucky will meet us at the mouth of Sandy.

The certainty of an immediate connection with the Cincinnati Hillsborough and Parkersburg railroad, may be conceived from the subjoined extract from a letter just received from Ellwood Morris, Esq. the consulting engineer of that work. "This line runs from Cincinnati to Hillsborough and through Bainbridge, between Piketon and Waverly and through Jackson, Vinton and Rutland, two miles north of Pomeroy, one mile north of Chester; thence crossing the Ohio (by a swing bridge) at the mouth of Shade river at Murraysville, and thence by the Ohio river bottom to Parkersburg. I call your attention to this road as giving the Virginia Central road the easiest and most direct communication with Cincinnati.

"This can be effected by a line from Point Pleasant to the little town of Vinton in Gallia County, *say eighteen miles*, by an entirely practicable railroad line which may be built at any time under our charter, as we have the right to build branches anywhere in Ohio."

Our line will be the extreme southern line in Ohio, and will form the extension of the Baltimore and Ohio railway across this state.

The distance from Point Pleasant to Cincinnati by our line (joining us at Vinton) will be about 156 miles—grades 50 feet per mile at a maximum. The road is nearly finished to Hillsborough, and we will be running to that point by May 1st—60 miles out from Cincinnati. Twenty miles more are now under contract to Bainbridge, Ross county, Ohio."

Mr. Morris's well established reputation is an abundant guarantee for these gratifying facts. Assurances have been made to Mr. Geo. Summers and others, that Cincinnati would contribute liberally to the Virginia work should it terminate at Point Pleasant.

The inclination of the Cincinnati and Parkersburg road to the southward, bringing it within 18 miles of Point Pleasant, and the admitted fact that the very shortest line to the Atlantic waters is from that point through Virginia by the Central line, would seem to invite the most timid to confidence in this enterprise. The rapidly increasing population of the western states, and the unprecedented increase in traveling and commerce on all the great lines, in despite even of their competition, afford all necessary assurance that the expectation of business, which has been so much more than realized on other lines, will not be disappointed here.

I transcribe from the recent address of the "Southern and Western Railroad Convention" the following, shewing the increase of business on various roads:



NAME OF ROAD.	Estimated number of passengers before opened.	Number of passengers soon after opened.	Number of passengers carried in 1848.
Boston and Worcester, - - -	23,500	262,830	807,143
Boston and Lowell, - - -	37,400	400,886	525,764
Fitchburg, - - -	71,790	327,034	745,825
Eastern, - - -	121,700	483,026	1,021,169
Boston and Maine, - - -	-	460,426	1,057,569

Another table which follows shews that in fifteen important roads the passenger traffic had increased on all at rates varying from 31 to 280 per cent., and averaging 121 per cent. A still more astonishing evidence of the increasing activity of railway transportation is afforded in a comparison of an extract from "Lardner's Railway Economy," with the recent transactions of the New York and Erie railroad.

Dr. Lardner states (page 343, Harper's Edition of 1850) the average daily receipts of twenty-eight railways, the most important in the New England states and New York, to be £ 2,723 or \$13,615 during the year 1847.

The New York and Erie railroad in 1850, with an entire length of road of 294½ miles, including the Chemung branch of 17½ miles, received for the conveyance of passengers, property and mails, \$810,000. This road was completed and opened in May 1851, its total length from Piermont to Dunkirk being 465 miles, and the total cost, including bonded obligations, \$24,000,000. Its *daily* receipts through the month of Sept'r last were nearly \$11,000, and the receipts for the month of Oct'r \$363,000 or \$12,000 very nearly per day. This road, then, it will be perceived, is possessed already of a revenue nearly equal to that of all the important railways in New England and New York only four years since. Its estimated gross receipts for 1852, based upon its present transactions, are \$4,000,000. This result, too, is achieved despite the competition of the Hudson river railroad—a work executed at great cost, and provided with ample means for the daily transit of 5,000 passengers—and of the connected chain of railway from Albany to Buffalo. Ordinary foresight would have apprehended failure in one of these two great enterprises; but here, as elsewhere, with increased facilities, traveling has proportionally increased, and the Hudson river road is doing, at the same time, a profitable business in the conveyance of passengers at one cent per mile.

In relation, then, to the western terminus of the Covington and Ohio railroad, I would recommend Point Pleasant, or the opposite bank of Kanawha; and that a branch be also constructed from the mouth of Scary creek, on Kanawha, via Guyandotte, to the mouth of Sandy.

My report of last year (at page 466, report B. P. W.) gave a summary of grades from Covington to the mouth of Greenbrier. Annexed is a summary of grades from the mouth of Greenbrier to Point Pleasant.

## SUMMARY OF GRADES:

Level, - - - - -	52.746 miles.
Ascending:	
0 to 10 feet per mile, - - - - -	12.841 "
Descending:	
0 to 10 feet per mile, - - - - -	68.099 "
10 to 20 feet per mile, - - - - -	19.129 "
Total distance, - - - - -	<u>152.815 miles.</u>

It was before stated that no grade would be necessary on Greenbrier river exceeding 20 feet per mile. Thus, in the distance of 203½ miles from the White Sulphur springs to Point Pleasant, there will be 52½ miles of level grade; no grade exceeding 20 feet per mile, and none for 100 miles, from Point Pleasant eastward exceeding 10 feet per mile. Elsewhere on the road, no grade exists in opposition to the heavy trade exceeding 40 feet per mile except at two points. The first of these is the passage of the line through a small depression, for the purpose of cutting off a bend of Dunlap's creek near the Exchange forge, where a grade of 60 feet per mile was run. It can either be reduced to 40 by deep cutting, or by some sacrifice of distance avoided altogether.

The second exception is at the Alleghany summit, where it is proposed to use assistant power.

The whole distance from Covington to Point Pleasant will be 228.08 miles. The limiting gradient in an easterly direction is 40 feet per mile, and in a westerly 50 feet per mile.

The whole estimated cost, including superstructure of wood and iron, stations and equipment, is, for 228.833 miles, \$4,909,902, or \$21,456 per mile.

The whole estimated cost of a branch from the mouth of Scary creek to the mouth of Big Sandy is, for 48.08 miles, \$704,804, or \$14,658 per mile.

Whole estimated cost from Covington to Big Sandy at its mouth, \$5,042,054 for 236.989 miles, or \$21,279 per mile.

These estimates are fully detailed in Appendices A and B.

In addition to the tunnels enumerated as indispensable in my last report, the total length of which was but 1 mile 800 feet, there will be two others of the respective lengths of 1,600 feet and 600 feet, making the entire length of underground work 1 mile and 3,000 feet. The information on which the estimates for tunnels were based, is the cost of similar works on various northern lines. All long tunnels were consequently estimated for \$70 per foot, and the short tunnels at \$60 per foot advance. Three short tunnels are, however, now in progress on the Virginia and Tennessee road at \$3 per cubic yard, or rather less than \$30 per foot linear.

As these tunnels are in limestone, it is but fair to presume that a reduction of the estimate for the tunnels of the Covington and Ohio road, which are through softer rocks, may be expected, at least to

such an amount as will reduce the short 60 feet grade before alluded to, near Covington, within the limit of 40 per mile.

The subject of a railway from Covington to the Ohio is so interwoven with the general internal improvement policy of the state as to require at my hands some notice of other works, either in actual progress or in prospect. Having been employed, not only for the purpose of making these examinations, but with the evident intention in the resolution of the assembly under which I act that every thing having a bearing on this question shall, if possible, be presented to view, I shall endeavor to suggest the most advisable policy for the state at large, advocating no local interest which I deem at variance with it.

It is not always possible to determine what occult meaning may attach to particular expressions; but I hope it may not be deemed uncharitable to suppose that, in a recent card of my friend Col. Garnet, in prospective reference to this very report, there might possibly be a claim to greater capability or faithfulness, as guardian of the state's best interests, in consequence of his being a "native Virginian." I am far from insisting on any such meaning, but controversialists must be guarded at all points. I must, therefore, be forgiven if I insist with "Lord Bacon" that "he who hath a wife and children hath given pledges to the country."

Nearly twenty-three years voluntary residence in the state, a family who are all native born Virginians, and a very long connection with the Board of Public Works in several important capacities, ought to constitute citizenship, certainly. My stake in the state's prosperity is at least equal to that of any engineer resident in it. Without playing the partizan, it cannot be disguised that the interests of the Central railroad, and that from Covington to the Ohio are one. They cannot be dissociated, and no liberal person can or will, I am persuaded, accuse me of doing more than my duty in uniting them in a common defence.

Assaults have been made on the Central line in two quarters—by the James river and Kanawha company, and by the Virginia and Tennessee railroad company. These were noticed by me through the public press at the time. With the view of making this discussion of the advantages of the Central improvement as complete as may be in my power, I am unable to dispense with the arguments contained in those papers. It would serve no useful purpose to give the thoughts a new dress. I therefore will introduce such extracts from them as may be pertinent to the matter in hand, begging the Board to remember that as the reports of the two companies above alluded to are public documents, to be presented as a portion of their own report, my defence of myself and the work with which I am connected ought then to go with them:

### THE JAMES AND KANAWHA IMPROVEMENT.

"An attempt is made, in the recent report of the James river and Kanawha improvement, to force conclusions in regard to the respective merits of the water-line and railway policies, on the extension from Covington westward.





soils, or their beds are cavernous. Anthony's creek is partly so, by Mr. Tuomy's admission. The Erie canal has a never failing supply.

"The latter runs through an expansive and fruitful region, adapted to the growth and maintenance, not of towns and villages alone, but of cities. The whole country from Covington to Gauley, is strictly a pastoral and mineral region, presenting very few points at which towns could be built.

"The Erie canal runs, a very large partion of it within soil, and is not there exposed to the destructive action of river freshets. The James River and Kanawha improvement will be so exposed throughout, except upon the mountain sections; here, however, the repairs of leaks in reservoirs, breaches of dams and other casualties, will probably make the cost of repairs no less than on other portions of the work.

"The number of registered freight boats on the James river canal was 50 in the year 1846. At the same time there were 3500 registered boats on the Erie canal. More than 1000 new boats were registered on the Erie canal that year. Their number is now 5015. But few more, I believe, are now on the James river boat register than in 1846.

"This accounts for the necessity of imposing tolls of 4 cents at a maximum and 1 cent minimum on the Virginia improvement, while they are 1 cent 6 mills at a maximum, and 1 mill at minimum on that of New York, except peltries, which pay 2 cents per ton per mile. The relative trade of the two improvements is 70 to 1. This is a proper datum from which to compute the respective trades: the closer proportion seeming to exist in the revenue of the two works arises from the enormous disproportion in the tolls. The New York work derives a large way trade from both margins in its entire length, while the Virginia improvement is hemmed in by mountains from Lynchburg to the Ohio river. These barriers confine its benefits to a narrow belt of country.

"What products of the Alleghany or Kanawha regions will the canal transport to Richmond? None. Coal and salt will be precluded, by competition from other quarters, from reaching even Lynchburg. Live stock have ceased to take that mode of conveyance. Transportation of passengers on the canal will cease with the opening of the Southside road. On that subject I shall say more hereafter. The proposition seems to be a general one, that in a country which, from its topographical features or its unimproved condition, can command but a small marginal business for an improvement, and which has to compete with other works for the terminal trade, the *only* form of improvement is a railway, the profits on the passenger traffic frequently more than defraying the expense of conveying the tonnage.

"After having for so long a period harped upon the theme of the Erie canal, deceiving themselves and almost every body else with expectations never to be gratified, the company seem to apprehend that the increasing dissatisfaction of the public with the water line improvement may dispose it to consider with candor the report of engineers employed by the state to make exact surveys and estimates for a railway.

"In apprehension evidently of the made by a full report on the railw various means are resorted to for th in that report when it shall appear.

"I propose to discuss the substan of their importance.

"In the first place, it must be tended to this controversy, tha line policy, in their anticipation, have delighted to fancy a reser this improvement and the Ea strongly insisted on by the James river and Kanawha c sider the points in which the to determine whether, in c similar results can with rea

"The Erie canal travers either hand a margin of its revenue, and furnish all charges upon the work a comparatively narrow constructed roads inste case of the New York c of the Southside railro afford but a small pe traffic to the canal.

"The insufficiency the Ohio to authorize advocates of the ca

"The Erie canal the undisputed trad tribution in that di New York and Bo

"The James r Point Pleasant, through the canal Orleans, and of tion of Baltimore

"The Erie c levels being 60 provement, bet rise, and a desc

"The conte report is wise length, was n river. No su

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any honor my present presented un seek from the y surveys when preparation, ac cost of the work ed by an accom

James river and cost the forthcoming the part of their co or all the instrumental se surveys and those what ground think you? he may have traced the gradients, deduced computations of the variou cost the cost of the work, ordinagian ladder, which he of all the labors of an engi dignity except when graced patent plans, but the design tion.

association, that the object of it aged in other departments of enabling its professor fearlessly not yet tried by himself, and such a reasoner would not admit cause they had not measured to Ellet had computed the cost of creek shoals at \$70,000 per mile been as good an authority for the the James river and Kanawha him for the unavoidable quantity

my report of February 5, 1850, that would be required between Covington The total length of all the tunnels miles. This arises partly from the a locomotive engines have enabled that the Alleghany is passed in the re feet long, while in the survey of Mr. make one of two and a half miles in abrier were rejected.

my last report, that but little obstacle on New river until within three or four of this summer has confirmed this laying the grades high up on the face only in the imagination of the James river

of the other obstacles which are so ingeniously

sions and estimates are nought, because he had an experimental line, and because he had never failed. The rapidity and success with which he has completed the first 146 miles of the canal, and his successes, which place him transcendantly beyond all competitors in this country, cannot save him from this unhappy predicament. He had not then made his estimate, which comes too near our own to suit the public, cannot be correct. His estimate was only \$17,000 for equipment, or very near \$20,000, including stock

Mr. Gwynn have been willing that such a conclusion should be drawn against himself and his estimates, on assuming the James river canal, which he endeavors by inuendo to connect with the facts I am shortly to present for the consideration of the legislature? I was selected by the Board of public works, in consideration of a very extensive experience in railways and estimates and some reputation in the other branches of engineering. It is very probable that all connection on my part with these works will soon determine. But should I be selected to construct the work in question, remembering that earthwork is but a small part of the work, masonry but masonry, and viaducts no more than bridges, I should undertake my first railway construction with the same confidence with which he has engaged in the construction of locks, dams and aqueducts for the first time on the James river canal. I should expect for at least equal success, and expect that a candid public will have equal confidence in my estimates.

"I therefore say that the engineer's estimates of \$70,000 must not stand as a minimum on his simple authority and a supposed analogy to the Hudson river railroad; because it is disproved by an *approximate location*, which he as an engineer knows very well will shew the *maximum* of cost. That maximum will be less than one-third of the engineer's minimum.

"The 4 miles above the mouth of Gauley are difficult, certainly, but by no means what the heated fancy of the engineer would wish them to be.

"The highest flood water is at Miller's ferry—32 feet above the ordinary water. The highest flood in other places about 20 feet. No very high protection walls will be necessary. The New river will be crossed to the south side at the Narrow falls at an elevation of about 22 feet. Compare this with the passage of the Baltimore and Ohio railroad over Cheat river at the Dunkard's bottom. The viaduct there is 80 feet high, and is followed by a portion of road defended by a protection wall at one point 168 feet high, with a rock escarpment above it of 120 feet, making the perpendicular height of the work at that point 288 feet. This is one railroad in the world that transcends that on New river in the stupendous character of the work, as much

"I will not charge able men who have position. I would consider lights more favorable public a candid examination it shall appear. A accompanied by can. In this task it may be accomplished and expected.

"I have before Kanawha company railway report. gincer, to substitute facts and careful made 13 years. On the ground out all the cuts all the cuts solids of earth unless he has would call engineer, requiring by bridges. of the engineer.

"It seems may have engineer and success often in the facts the plan a railway instead cost of comparison of tunnel.

"It but 1 ton and will be fact, the us to cent Ellet length.

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... Virginia and Tennessee ... constructing it for little ... states, which were about ... mistake in these random estimates and quantities.

... it is well known to be a ... to cost, for the express purpose of a successful competition with the Hudson. This is effected by ... many miles of it in the river far ... the rocky points, and some few ... accounts very well for the abundance of 'readed at their mouths,' and the ... some of them pile bridges) being ...

... to institute a comparison into the ... we not know that the James river ... mile, and that many railways are ... that sum—the most difficult for less

... estimates with great confidence ... that of a railway on the 14 miles ... \$45,000 per mile?

... bottom land, and the fall of the ... mile. How will it be in crossing the ... age and the excess of tunneling?

... \$1,000 the foot lift would make ... and leave \$20,000 per mile as the expenditure on Dunlap's creek. This ... mountain division, on which the freight ... In short it must be conceded to ... whole 76 miles of canal from Covington ... as exceeding in cost a railway by ... \$3,420,000. The remaining distance ... the average cost of the mixed pool ... hburg to Buchanan, \$36,000 per mile, ... cost of the railroad will be \$16,000 per ... on the 150 miles will be \$2,400,000. ... mentioned excess will give an entire ... of \$5,820,000.

... to develop the resources of the country ... canal, and awaiting its effect, prior to the ... accounts briefly to this: five years have ... construction of the 50 miles between Lynchburg ... miles per annum. The 280 miles therefore ... 28 years for their completion, and allowing the operations of the 'plough, the

loom and the anvil,' the present possessor of James river stock may entail the expectation and profits of that desirable consummation upon his grandchildren.

"A railway from Covington to Point Pleasant will be 230 miles in length; the 200 miles from the western base of the Alleghany to the Ohio will at no point have a grade exceeding 20 feet to the mile, and will possess on that portion a facility for cheap transportation almost equal to the Reading railroad, on which coals are carried for 5 mills per ton per mile. The recent report of the committee of stockholders of the James river and Kanawha company shews the cost of transportation on various Northern railways to be about 8 mills per mile for a ton of freight. Coals are now carried on English railways for about 5 mills the ton.

"With the cost of traction so reduced, and a certainty of passenger traffic which no canal can now command, the triumph of railways is complete. With the aid of the electric telegraph they have become the most potent instruments of modern commercial intercourse. By their joint agency, on an advance in the price of any article, it can be summoned to market with a magical facility almost equal to the operation of the wishing cap of Fortunatus—but a call from the telegraph to a canal would be like galvanism to a corpse, inducing some contortion, but no useful locomotion.

"CHAS. B. SHAW."

*Extracts from a Letter to COL. FONTAINE, relating to the Virginia and Tennessee Railroad.*

"The distances from the mouth of Greenbrier by my surveys, and those for the Central road, are as follows:

From the mouth of Greenbrier to Covington,	-	76 miles.
From Covington to Staunton,	- - -	70 "
From Staunton to Richmond,	- - -	136 "
		<hr/>
		282 miles.
		<hr/>

"By Mr. Garnett's own statement, on which the estimated distance from Lynchburg to Richmond is no doubt the shortest possible, as is mine of that from Staunton to Covington, the distance from the mouth of Greenbrier to Richmond is  $278\frac{1}{2}$  miles, making a difference of  $3\frac{1}{2}$  miles only in favor of the Virginia and Tennessee railroad.

"In the paragraph which follows the comparison of measured distances, as well as in a former one, he admits the ruling gradients on the Virginia and Tennessee road to be 60 feet per mile rising eastward, and 68 feet per mile falling in that direction; and then rather hastily assumes the ruling gradient on the Staunton and Covington road to be 105 feet per mile both ways. As you have no such grades on your road, it is but fair to presume that allusion is here made to the transit of the Alleghany, on the proposed Covington and Ohio railroad. Here, however, I take issue with him.

"Mr. Garnett very well knows that obstacles to railway transportation, when collected into a very short space, are much less formidable than if diffused over the whole extent of the road. Can he not see the great difference between a single five mile gradient of 105 feet to the mile, and 5 gradients of 1 mile each having the same rate of grade, but dispersed to sundry points of the road?"

"The latter system would require five assistant engines, each of them standing with steam up, idle four-fifths of the time, while the former system would require but one assistant engine, which would be at full work and do as much as the five.

"A gradient is not called the ruling gradient except it limit (or rule) the load to be transported. If grades are distributed as in the latter system, and assistant power is not employed upon them, then they may with propriety be called the ruling gradients; but where a single heavy grade occurs on any line of road, and spare power is provided to overcome it, it is an exceptional gradient; and the more active the trade, the more profitable are such gradients, as all fractions of labor are thus husbanded. On the Covington and Ohio railroad, between the mouth of Greenbrier and the town of Covington, the ruling grade going eastward will be 40 feet per mile, and westward 50 per mile. Leaving the exceptional gradient at the 7 mile pass of the Alleghany to be discussed hereafter, we will compare the Covington and Ohio with the Virginia and Tennessee road.

"Taking Col. Garnett's own table of the performance of a given engine on grades of 60 and 40 feet respectively, the weight transported will, on the latter, be 202 tons, while on the former it will be but 144 tons.

"Grades of 40 feet then, require but seven-tenths of the power requisite on grades of 60 feet; or, what is plainer, 7 locomotives, on the first system of ruling grades, will do the work of 10 such engines on the latter.

"As for the exceptional gradient of 105 feet per mile, its value as an obstacle is easily computed.

"Col. Garnett speaks, in the paragraph just preceding his table of power, of applying, in a comparison of the Baltimore and Ohio with the Virginia and Tennessee road, "the rule generally used for assigning to a certain amount of ascents and descents on a road their equivalent in distance."

"The rule of Messrs. Latrobe and Knight is to divide the sum of the ascents and descents by  $52\frac{5}{8}$ —the quotient giving the number of equivalent miles of level grade.

"My report of last year announces another, and I think a more philosophic rule, too long to repeat.

"The Alleghany inclines are 5 miles of 105 feet per mile ascending from the east, and 2 miles of  $92\frac{5}{8}$  feet per mile descending towards the west. Equating the grades both eastward and westward, by my own rule, the average equated excess of distance will be 14½ miles. By the rule of Latrobe and Knight, the equivalent excess of distance will be 13.56 miles. If now we suppose this same mountain to have been graded with Col. Garnett's gradients, 5 miles at 68 feet



per mile on the east side, and 2 miles of 60 feet per mile on the west; and if we again apply both rules to an equation of the grades, the equivalent excess of distance by my own rule will be 8 miles, and by that of the other engineers  $8\frac{7}{8}$  miles.

“The advantage then at that mountain of Col. Garnett’s system of gradients over the one adopted, would be  $6\frac{1}{4}$  miles by my own rule, and  $4\frac{7}{8}$  by that of Messrs. Latrobe and Knight.

“The high exceptional gradients then at that point give to the general system of Col. Garnett an advantage at most equal to but  $6\frac{1}{4}$  miles of distance. On the other side, I claim for the Covington and Ohio railroad the advantage of being able to transport on all other parts of its line nearly 50 per cent. more, with the same power, than can be done on the Virginia and Tennessee road.

“Col. Garnett will probably endeavor to get rid of this difficulty by asserting that the comparison must be made throughout, from the mouth of Greenbrier to Richmond. This I should be very glad if he would do by a comparison of profiles on the entire of both routes, and equating the grades throughout. Of the 282 miles, from the mouth of Greenbrier to Richmond, there are but 100 miles altogether which do not occupy very level ridges or gentle river bottoms. Whatever advantage might result to the Southside connection from the goodness of the grades on the Southside railroad near Richmond, will be lost on all the frequent undulations of the Virginia and Tennessee road at the west end, and in the occurrence of 50 feet gradients adverse to the heavy trade on the Danville road in approaching Richmond, after it crosses the Southside road. At Covington, however, all the heavy tonnage will have an opportunity to take the canal, with the important advantage of water transportation for 90 miles more than the same tonnage if conveyed to Lynchburg on the Virginia and Tennessee railroad.

“It will not do, however, to permit Col. Garnett to deceive himself with the expectation that Richmond can be made a point in the through transit of passengers from the great West. As soon expect them to go round by the North Pole.

“The Central road could command the whole Western traveling towards the seat of the general government as far as Gordonsville (358 miles) but no farther. Thence it must pass on to the Orange and Alexandria railroad by a route 108 miles shorter in measured distance, than by the Virginia and Tennessee railroad through Richmond. In equated distance the difference, I am persuaded, would be greater.

“As Col. Garnett seems to concede the propriety of this mode of comparing routes, and as it has elsewhere been stated that the distance via the Parkersburg and the Baltimore and Ohio railroad is but 580 miles to Baltimore, while by way of the Central railroad and Richmond it is 760 miles, it becomes worth while to examine that argument.

If the grades on the Baltimore and Ohio railroad be equated from the north branch of the Potomac to the western base of the Laurel mountain, and the same be done at the single summit existing at the Alleghany mountain, on the Covington and Ohio road, there is



an excess of equated distance in favor of the latter road, of 60 miles. To this add the 108 miles cut off from the Richmond route at Gordonsville, and the 180 miles advantage of the Baltimore road will be reduced to 12. My own knowledge of the country to be traversed by the Parkersburg branch enables me to assure you that an equation of grades would *much* more than annihilate that difference. Thus, from Cincinnati to Baltimore, the shortest route would be by the Central road.

"The substitution of the Virginia and Tennessee, and its branch down New river, for the Central road, must have the certain effect of diverting the whole Western travel to the Baltimore road, and the branch of the Virginia and Tennessee to the Ohio will have been made in vain. On the other hand exists the certainty that the Central road could command that traveling, and that the profits derived from it would greatly reduce the cost of tonnage traffic to Richmond, and enlarge the sphere of its inland commerce.

"By the Virginia and Tennessee railroad the trade of the south side of James river is doomed eventually to pass by Richmond and take shipping at City Point or Norfolk.

"From Burke's to City Point by the Southside railroad there will be no grade adverse to the preponderating traffic exceeding 15 feet per mile, while from the same point via the Danville road to Richmond are adverse gradients of 50 feet per mile. The distance, moreover, from Burke's to the deep water of the James at City Point is no greater than from Burke's to Richmond, leaving it scarcely a matter of doubt that the trade would eventually take shipping there.

"It is important to Richmond to prosecute the Central road as a means of diverting the trade of the West from such a destiny.

"The project of a railway to the deep water of York river must be resumed. A place would then spring up which would be the Piræus of Richmond, and would confer on it advantages unknown to any other southern city. I subjoin some statements in confirmation of this:

From Staunton to Baltimore via Winchester,	-	-	218 miles.
" " " Alexandria,	-	-	196 "
" " Richmond, 136 miles,	}		
Thence to York river, 40 "			176 "
From Baltimore to Capes of Virginia,	-	-	200 "
" York river to Capes,	-	-	60 "
" Staunton to the Capes of Virginia via Winchester,			418 "
" Staunton via York river and Richmond to Capes,			236 "
Excess in favor of Richmond over Baltimore,	-		182 "
" " " " Alexandria, about			114 "

"The execution of the York river railroad will forever preclude all the danger of the tonnage traffic leaving the Central road at Staunton for Baltimore, or even at Gordonsville for Alexandria, as a point on York river approachable by vessels of any burthen, lies from one to two days sail nearer to the continent of Europe, as well as nearer to the Western states of the Union."

I am disposed to insist upon the views expressed in both of the above extracts. The most advisable mode of resuscitating the canal appears to me the construction of a railroad from Buchanan to the Clifton forge, at which point it would intersect the Central railroad. Thence a common stem should be constructed by way of Covington and the White Sulphur springs to the mouth of Greenbrier, and thence by the New and Kanawha rivers to the mouth of the latter, with a branch from the mouth of Scary creek to the Ohio at the mouth of Big Sandy. What amount of benefit this road will confer on the canal, I am not prepared to say, nor can I conjecture, but I presume that it must in some way be brought into connection with the Central line, and the least expensive mode will be by a railroad. As the 28 miles from Clifton forge to Buchanan will be chiefly a freight road, it should be laid with heavy rail; and as no great velocity will probably ever be desirable for the heavy commodities which will take that line, a single track with passing places will be more economical and sufficiently safe.

The unexpected desire manifested by the Virginia and Tennessee railroad to become the great monopolist of both the Southwestern and Western traffic, merits a more particular notice.

Their proposed branch down New river, if not utterly valueless, could not become profitable for many years to come, as all its business would be local. It could not command the main traveling from the West, because the route through Richmond is 108 miles longer in measured distance to Washington than by the Central and the Orange and Alexandria roads. Without the traveling it could not profitably carry the tonnage; nor could it compete for the latter with the Central road and canal united, because of inferiority of grade to the former, and of the greater cheapness—at the moderate velocities which heavy tonnage demands—of water transportation.

The importance of the traveling to the Virginia mineral springs is sufficiently great of itself to call for an extension of the Central railroad to the Ohio. In good seasons there are booked about 5,000 visitors at the different springs. The simple doubling of this number would afford more than half the support required by the work. What prospect the Virginia and Tennessee railroad would have of being able to accommodate this travel, could it be substituted for the extension of the Central, the following exhibit will shew:

*Table showing the proximity of the various Mineral Springs to the Virginia and Tennessee Railroad and its New River Branch, and to the Central Railroad.*

				Central R. R. and extension.	Virginia and Tennessee R. R. and extension.
To	Blue Sulphur springs,	-	-	8 miles.	20 miles.
	Red Sulphur do.	-	-	10 "	6 "
	Salt Sulphur do.	-	-	15 "	23 "
	Sweet do.	-	-	7 "	45 "
	Red Sweet do.	-	-	8 "	46 "
	White Sulphur do.	-	-	0 "	45 "
	Warm do.	-	-	10 "	72 "
	Hot do.	-	-	15 "	77 "
	Bath Alum do.	-	-	6 "	82 "
	Rockbridge Alum do.	-	-	8 "	90 "

Average distance to 16 watering places, 8.4 miles, - - 50.6 miles.

In relation to the through travel from the West to Richmond and to the seat of government by the Virginia and Tennessee, by the Baltimore and Ohio and by the Central and Orange and Alexandria roads, let the following table of distances speak :

From Cincinnati to Point Pleasant,	-	-	-	156 miles.
" Point Pleasant to Covington,	-	-	-	228.8 "
" Covington to Staunton,	-	-	-	70 "
" Staunton to Charlottesville,	-	-	-	39 "
" Charlottesville to Richmond,	-	-	-	96 "
Whole distance from Cincinnati, via. Central railroad, to Richmond,				<u>500.8 "</u>
From Cincinnati to the mouth of Greenbrier,	-	-	-	308 miles.
" mouth of Greenbrier to Richmond, by way of Va. and Tenn. railroad,	-	-	-	278½ "
Whole distance from Cincinnati to Richmond, via. Tenn. and Va. railroad,				<u>586½ "</u>
Difference in measured distance in favor of the Virginia and Tennessee railroad, 3½ miles.				
From Cincinnati, via Parkersburg and Baltimore and Ohio railroads to Relay,	-	-	-	571 miles.
From Relay to Washington,	-	-	-	81 "
From Cincinnati, via Parkersburg, to Washington,				<u>652 "</u>
From Cincinnati to mouth of Greenbrier,	-	-	-	308 miles.
" mouth of Greenbrier, via Central railroad, to Staunton,	-	-	-	146 "
" Staunton to Gordonsville,	-	-	-	60 "
" Gordonsville to Alexandria,	-	-	-	68 "
" Alexandria to Washington,	-	-	-	6 "
From Cincinnati, via Central railroad, to Washington,				<u>608 "</u>
From Cincinnati to mouth of Greenbrier,	-	-	-	308 miles.
" mouth of Greenbrier, via Va. and Tenn. railroad, to Richmond,	-	-	-	278 "
" Richmond to Washington,	-	-	-	130 "
From Cincinnati, via Va. and Tenn. railroad, to Washington,				<u>716 "</u>
Difference in favor of Central line,				108 miles.

In this comparison it should not be lost sight of, that on equating the distance through the Alleghany region alone, there will be an excess in favor of the Virginia Central line over the Baltimore and Ohio, of more than fifty miles, making the former demonstrably the best, as it is the shortest in equated distance from Cincinnati to Washington. This advantage, in addition to the amœnity of the winter climate on the line of the Virginia Central road, must ensure it a large share of the traveling, even to Baltimore and places farther north.

From the mouth of Greenbrier to Richmond the Virginia and Tennessee road is  $3\frac{1}{2}$  miles shorter, but the superiority of grade on the Central line is so firmly established in my mind, that I can only be convinced of the contrary by an exhibition of profiles and equations of the distances. To this course I would invite the advocates of the Virginia and Tennessee and its branch down New river, as the only mode by which they can establish any advantage for their line.

This monstrous proposal—the contraction of the Central line, and all the broad interests it subserves, into the sphere of the operations of the Virginia and Tennessee road—would be attended with consequences similar to the attempt to confine the circulation in a living body to one great artery, by obliterating the branches. The stalwart limbs, by which it is borne and defended, would wither away.

What is to become of the large vested interests of the commonwealth in the Central and Alexandria railroads and in the James river canal, should their extension be interrupted and their feeders cut off, to gratify this corporation?

What accommodation will the New river branch afford to the counties of Bath, Highland, Pendleton, Pocahontas, Lewis, a large part of Randolph and the best portion of Greenbrier?

An attempt is made to alarm Richmond with the fear that the traffic may escape either at Staunton or Gordonsville. That the tonnage traffic cannot do so, I have, I think, shewn; and I think it equally certain that the great stream of traveling which the Central road must command—even should it take another direction at Staunton or at Gordonsville, after having pursued the Central line, as it must do for 300 or 350 miles—will more than compensate for its loss, in the reduction it will occasion in the rate of transportation on heavy freights.

Richmond must command the tonnage trade, and the lower the rates of transportation the more extended will be its inland commerce.

I see nothing to apprehend in a connection with the Manassa gap road. The freight of the upper valley would not, as I have shewn, be diverted to Alexandria, because Richmond is nearer the sea; and the trade of Shenandoah and Page is the legitimate perquisite of Alexandria. Richmond, with its numerous advantages, can afford to yield it to her.

Nor do I see any great occasion for lamentation, that the south side trade is likely to leave Richmond for Petersburg or Norfolk. They, too, are Virginia towns, and their enterprize has earned that trade.

I do, however, see, and I think it is daily becoming more evident, that Richmond will very shortly be mainly dependent for its prospe-

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sion of the Central line to the Ohio and the construc-  
y to some suitable point on York river.  
ss and estimates on the other lines are completed, I  
n; and meanwhile,

I have the honor to be,

Gentlemen, your ob't serv't,

CHAS. B. SHAW.

. nary 6, 1852.

## APPENDIX.

## [ A. ]

*Estimate of Cost of Construction from the Mouth of Greenbrier River to the Ohio River at the Mouth of the Great Kanawha.*

## I. LINE C, ALONG NEW RIVER.

*Division 1, (or New River Falls Division,) extending from the Mouth of Greenbrier River to Bowyer's Ferry—42.093 Miles.*

Earthwork, 1,051,000 c. y. at 15 cents,	-	-	-	157,650 00
Rock cutting, 238,000 c. y. at 70 cents,	-	-	-	166,600 00
Tunneling, 1600 linear feet at \$ 70,	-	-	-	112,000 00
Masonry—Bridge, 2,390 c. y. at \$ 4,	-	-	9,560 00	
“ Culvert, 1,570 c. y. at \$ 4,	-	-	6,280 00	
“ “ 3,270 c. y. at \$ 2,	-	-	6,540 00	
“ Walling, 46,400 c. y. at \$1 50,	-	-	69,600 00	
				<u>91,980 00</u>
Bridging, truss, 220 linear feet at \$16,	-	-	3,520 00	
“ “ 200 linear feet at \$12,	-	-	2,400 00	
				<u>5,920 00</u>
Grubbing and clearing 28 miles at \$ 300,	-	-	-	8,400 00
Total New river falls division—graduation, masonry and bridging,	-	-	-	<u>\$ 542,550 00</u>

[ \$12,900 per mile nearly; or \$22,100 per mile, including superstructure and contingencies.]

*Division 2, (or New River Cliffs Division,) extending from Bowyer's Ferry to the Narrow Falls of New River, near the Mouth of Gauley River—17.670 Miles.*

Earthwork, 517,000 c. y. at 15 cents,	-	-	-	77,550 00
Rock cutting, 337,000 c. y. at 70 cents,	-	-	-	235,900 00
Tunneling, 600 linear feet, at \$ 70,	-	-	-	42,000 00
Masonry, bridge, 1280 c. y. at \$ 4,	-	-	5,120 00	
“ culvert, 1270 c. y. at \$ 4,	-	-	5,080 00	
“ “ 1880 c. y. at \$ 2,	-	-	3,760 00	
“ walling, 62,000 c. y. at \$1 50,	-	-	93,000 00	
				<u>106,960 00</u>
Bridging, truss, 80 linear feet at \$16,	-	-	1,280 00	
“ “ 90 linear feet at \$12,	-	-	1,080 00	
				<u>2,360 00</u>
Grubbing and clearing 17 miles at \$ 300,	-	-	-	5,100 00
Total New river cliffs division—graduation, masonry and bridging,	-	-	-	<u>\$ 469,870 00</u>

[ \$26,600 per mile nearly; or \$37,200 per mile, including superstructure and contingencies.]

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**E, ALONG THE LEFT OR SOUTH BANK OF KANAWHA RIVER.**

*or Kanawha Division, extending from the Narrow Falls of New River to the Mouth of Big Scary Creek—53.128 Miles.*

	0 cubic yards,	at 15 cents,	-	-	-	156,450 00
	"	at 70 "	-	-	-	57,400 00
	"	at \$5,	-	-	4,500 00	
	"	at 4,	-	-	33,280 00	
cut,	150 "	at 4,	-	-	13,400 00	
"	"	at 2,	-	-	10,740 00	
walling,	2,000 "	at 1 50,	-	-	28,500 00	
						90,420 00
truss,	1700 linear feet,	at \$20,	-	-	34,000 00	
"	620 "	at 18,	-	-	11,160 00	
"	310 "	at 12,	-	-	3,720 00	
"	pile, 1040 "	at 8,	-	-	8,320 00	
						57,200 00
g and clearing	9 miles,	at \$250,	-	-	-	2,250 00

**Kanawha division—graduation, masonry and bridging, \$363,720 00**

**[\$6,900 per mile nearly, or \$15,500 per mile, including superstructure and contingencies.]**

*Division 2, (or Lower Kanawha Division,) extending from the Mouth of Big Scary Creek to the Ohio River—24 Miles.*

earthwork,	907,000 cubic yards,	at 15 cents,	-	-	-	136,050 00
Rock cutting,	10 000 "	at 70 "	-	-	-	7,000 00
Masonry, bridge,	11,300 "	at \$4,	-	-	45,200 00	
" culvert,	1450 "	at 4,	-	-	5,800 00	
" "	2290 "	at 2,	-	-	4,580 00	
						55,580 00
Bridging, truss,	400 linear feet	at \$18,	-	-	7,200 00	
"	200 "	at 15,	-	-	3,000 00	
"	410 "	at 12,	-	-	4,920 00	
"	pile, 2080 "	at 8,	-	-	16,640 00	
						31,760 00
Grubbing and clearing	11 miles,	at \$250,	-	-	-	2,750 00

**Total Lower Kanawha division—graduation, masonry and bridging, \$233,140 00**

**[\$5,800 per mile nearly; or \$14,300 per mile, including superstructure and contingencies.]**

**SUMMARY OF LINE C AND E.**

Line C, division 1, (New river falls division,)	-	-	-	542,550 00
" C, division 2, (New river cliffs division,)	-	-	-	469,570 00
" E, division 1, (Upper Kanawha division,)	-	-	-	363,720 00
" E, division 2, (Lower Kanawha division,)	-	-	-	233,140 00
Total—graduation, masonry and bridging, (\$10,530 per mile,)	-	-	-	1,609,280 00
Superstructure and equipment, 152.815 miles, at \$7,200,	-	-	-	1,100,263 00
Engineering and contingencies, 10 per cent.	-	-	-	2,709,548 00
				270,934 00
Total cost from mouth of Greenbrier to mouth of Kanawha, (or \$19,502 55 per mile.)	-	-	-	\$2,980,482 80

*General Summary of Cost from Covington to the Ohio River on Lines A, C and E; that is, by way of the White Sulphur Springs, Greenbrier and New Rivers, and along the South Bank of Kanawha River.*

Earthwork,	-	-	-	-	-	909,300 00
Rock,	-	-	-	-	-	637,300 00
Tunnels,	-	-	-	-	-	574,000 00
Masonry,	-	-	-	-	-	484,810 00
Bridging,	-	-	-	-	-	180,540 00
Grubbing,	-	-	-	-	-	30,000 00
[Or \$12,349 per mile.]						2,815,950 00
Superstructure and equipment 228.833 miles, at \$7,200 per mile,	-	-	-	-	-	1,647,597 60
						4,463,547 60
Engineering and contingencies, 10 per cent.	-	-	-	-	-	446,354 76
Total cost, (or \$21,456 28 per mile,)	-	-	-	-	-	<u>\$4,909,902 36</u>



BIG SCARY CREEK TO MOUTH OF SANDY.

-	-	-	-	116,610 29
-	-	-	-	126,102 73
-	-	-	-	51,842 34
				<hr/>
dging, [\$6130 per mile,]	-	-	-	294,555 29
1 miles, at \$7200,	-	-	-	346,176 00
				<hr/>
per cent.	-	-	-	640,731 29
	-	-	-	64,073 12
				<hr/>
to mouth of Sandy,	-	-	-	<u>\$704,804 41</u>

CHAS. B. SHAW, C. E.

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[ B.]

*Cost of Construction from the Mouth of Big Scary Creek, (on the Great Kanawha,) to the Mouth of Big Sandy River.*

*or Big Scary Division,) extending from the Kanawha Valley to the dividing Ridge between Hurricane Creek and Mud River—11.34 Miles.*

1	448,701 cubic yards, at 15 cents,	-	-	-	67,005 15
	24,668 " " at 60 "	-	-	-	14,800 80
	400 linear feet at \$ 60	-	-	-	24,000 00
	dge, 55 cubic yards, at \$ 7	-	-	385 00	
	1079.22 " " at \$ 3 50,	-	-	3,777 27	
	culvert, 727 " " at \$ 4	-	-	2,908 00	
	" " 517 " " at \$ 2	-	-	1,034 00	
					8,104 27
	superstructure,	-	-	-	2,000 00
	clearing $3\frac{1}{2}$ miles, at \$ 200,	-	-	-	700 00
1	ary division—graduation, masonry and bridging,	-	-	-	<u>\$116,610 23</u>

[ \$10,300 per mile nearly; or \$19,200 per mile, including superstructure and contingencies.]

*Division 2, (or Mud River Division,) extending from the dividing Ridge between Hurricane Creek and Mud River to the Ohio Bottom—24.62 Miles.*

Earthwork, 624,439 cubic yards, at 15 cents,	-	-	-	93,665 85
Rock cutting, 3334 " " at 60 "	-	-	-	2,000 40
Masonry, bridge, 595.30 cubic yards, at \$ 7,	-	-	4,167 10	
" " 1242.11 " " at \$ 3 50,	-	-	4,347 38	
" culvert, 2164 " " at \$ 4,	-	-	8,656 00	
" " 1788 " " at \$ 2,	-	-	3,576 00	
				20,746 48
Bridging, superstructure,	-	-	7,740 00	
" piling in foundation,	-	-	500 00	
				8,240 00
Grubbing and clearing $7\frac{1}{2}$ miles, at \$ 200,	-	-	-	1,450 00
				<u>\$126,102 73</u>

[ \$5,100 per mile nearly; or \$13,600, including superstructure and contingencies.]

*Division 3, (or Ohio Division,) extending along the Ohio Bottom to the Mouth of Big Sandy River—12.12 Miles.*

Earthwork, 172,833 cubic yards, at 15 cents,	-	-	-	25,924 95
Masonry, bridge, 665.64 " " at \$ 7,	-	-	4,659 48	
" " 1182.26 " " at \$ 3 50,	-	-	4,137 91	
" culvert, 543 " " at \$ 4,	-	-	2,172 00	
" " 99 " " at \$ 2,	-	-	198 00	
				11,167 39
Bridging, superstructure,	-	-	12,600 00	
" piling in foundation,	-	-	1,500 00	
				14,100 00
Grubbing and clearing $3\frac{1}{2}$ miles, at \$ 200.	-	-	-	650 00
				<u>\$51,842 34</u>

[ \$4,200 per mile nearly; or \$14,700, including superstructure and contingencies.]

## SUMMARY OF LINE FROM BIG SCARY CREEK TO MOUTH OF SANDY.

vision 1 (Big Scary division,) - - - -	116,610 22
“ 2 (Mud river division,) - - - -	126,102 73
“ 3 (Ohio division,) - - - -	51,842 34
<hr/>	
tal—graduation, masonry and bridging, [\$ 6130 per mile,] -	294,555 29
perstructure and equipment 48.08 miles, at \$ 7200, -	346,176 00
<hr/>	
gineering and contingencies, 10 per cent. - - - -	640,731 29
	64,073 12
<hr/>	
tal cost from mouth of Big Scary to mouth of Sandy, - -	\$ 704,804 41
<hr/>	
(Or \$14,658 99 per mile.)	

CHAS. B. SHAW, C. E.







## FLOYD C. H. AND HILLSVILLE TURNPIKE ROAD.

ENGINEER'S OFFICE FLOYD C. H. AND  
HILLSVILLE TURNPIKE ROAD, Dec. 5, 1851.

*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

In conformity to law, I have the honor to submit the following report of the condition and progress of the work under my charge to 30th September last :

An appropriation of \$4,500 being made during the last session of the legislature for the purpose of extending the road eastwardly from Floyd C. H. so as to connect with the Rockymount turnpike road at the top of the Alleghany mountain, the length of the road under my charge was increased about  $12\frac{1}{2}$  miles, being now altogether 41 miles 2,640 feet. This additional section was let on the 1st June to Messrs. Price & Headen, for the sum of \$375 per mile.

About  $26\frac{3}{4}$  miles of the road have been completed and received, viz: 13 continuous miles immediately east of Carroll C. H.,  $8\frac{3}{4}$  continuous miles immediately west of Floyd C. H., and 5 continuous miles immediately east of the same point, leaving about  $7\frac{1}{2}$  miles between Floyd C. H. and Carroll C. H. and  $7\frac{1}{2}$  miles between Floyd C. H. and the top of the mountain to be completed. These will be finished about the 1st of April next.

The bridge over Big Reed island creek was let to Mr. Robert L. Toncray in May last. It is to be upon the lattice plan, roofed, weather-boarded and painted. This work will be completed early in the winter, at a cost (including approaches) of about \$3,000.

No toll-gate has as yet been erected: one will be placed upon each section in January, if the condition of the road be such as to admit of the collection of tolls.

The appropriation before mentioned for the extension of the road was inadequate for the *actual construction*, and of course still more so for both the *construction* and *superintendence*. By the accompanying statement it will be seen that a further appropriation of \$1,500 will be necessary properly to complete the road. I will mention, however, that it is *possible*, although not advisable, to make such alterations in the plan of the road as to reduce its cost to the amount of the existing appropriations.

The Rockymount turnpike company, at a cost of about \$2,700, constructed a section of 5 miles of road on the eastern slope of the Alleghany mountain, at a grade of  $3^{\circ}$ , which unites with the state road at the top of the mountain. The road, however, was only built 13 feet in width, exclusive of ditches. The means of that company, so far from promising any ability on their part to widen it, do not even admit of their keeping it in passable repair. The whole line of road

west of the mountain built by the state will be useless, except for local purposes, unless this section is widened and in repair. Running for 3 miles along the face of a precipitous mountain, the occurrence of the least accident would be attended by the most serious consequences. In its present condition it is useless and is rapidly going to ruin. Dependent as your road is upon this section for its communication with the eastern portion of the state, it is all important that it should be placed under your control. The company, in its embarrassed condition, would be much relieved if the state were to purchase it at the original cost, and a further expenditure of \$1,300 would widen it to correspond with the remainder of the line. For this purpose I respectfully suggest that an appropriation of \$4,000 or \$4,500 be made. If this section be widened, when the Rockymount company have completed a small portion of their road now under contract, there will exist an unbroken line of turnpike road extending from Wytheville, through the counties of Carroll, Floyd and Franklin, to Franklin C. H. At that point two turnpikes diverge, one going to Danville and the other to Lynchburg. It would be an unfortunate economy that permitted one short section to remain in a condition that must necessarily sever this connection.

Respectfully submitted.

LUDWELL H. BROWN,  
*Eng. and Supt.*



**Statement shewing the Probable Cost of the Floyd Courthouse and Hillsville Turnpike Road.**

**Cost of work completed or under contract :**

1,320 feet completed at Floyd courthouse,	-	-	150 00	
8 miles 2,871 feet, section 1st, completed, cost,	-	-	2,836 73	
20 miles — feet, section 2d, progressing, at \$ 323 per mile,	-	-	6,460 00	
12 miles 2,640 feet, section 3d, progressing, at \$ 375 per mile,	-	-	4,687 50	
			<u>14,134 23</u>	
Bridge and approaches at Big Reed island creek, say	-	-	3,000 00	
Probable cost of macadamizing &c., \$ 600, tollgates, &c., \$ 400,	-	-	1,000 00	

**Incidental expenses actually incurred to 30th Sept. 1851, viz :**

Cost of the location,	-	-	343 75	
Tents and tent furniture,	-	-	44 02	
Horse, saddle and bridle,	-	-	100 00	
Repairs of road,	-	-	60 00	
Salary and expenses of engineer,	-	-	1,489 90	
			<u>2,037 67</u>	

**Estimated expenses to 1st April 1852 :**

Salary of engineer and superintendent,	-	-	500 00	
Incidental expenses and repairs,	-	-	328 10	
			<u>828 10</u>	
				<u>2,865 77</u>

Total probable cost of the road,	-	-	-	21,000 00
Amount of existing appropriations,	-	-	-	19,500 00
Deficiency to be provided for,	-	-	-	<u>\$ 1,500 00</u>

**LUDWELL H. BROWN,**  
*Eng'r and Superintendent.*

September 30th, 1851.

## HAZEL RIVER NAVIGATION COMPANY.

OFFICE HAZEL RIVER NAVIGATION Co.  
THOMPSONVILLE, Jan. 2, 1852.

The president and directors of the Hazel river navigation company have the pleasure to inform the Board of public works that the improvement has so far advanced as to be used for the purpose of transporting the crops of the farmers to market, which has been accomplished in about twelve months from the organization of said company. It is true our work has not been so useful as it ought to have been in consequence of some difficulty in the navigation of the main branch below the junction of the Hazel river with the Rappahannock, and which this company hope and have no doubt the Rappahannock company will take some efficient and early steps to remedy, as our navigation some thirty to forty miles above was in working condition for months when boats could not pass below where the quantity of water was greater. The roads leading to the head of this navigation have not been improved—consequently, the farmers have much difficulty in approaching it, which operates greatly to the injury of the agricultural interest and disadvantage of the improvement, which can be removed by individual contributions and some aid from the state, which we hope will be given, and that to a portion of the state which, until within a few years past, has been entirely neglected. We have made but small progress in ascertaining the damages, the weather having been inclement since our commencement. Our work is not as secure as we would desire it at one or two points, arising from two reasons: the want of means and some expected opposition to the company's proceeding with the work as we desired. We refer you to our treasurer's account, which we have examined, and believe correct, for more definite information relative to our condition to the 30th September 1851. We regret that our report has not been forwarded earlier: the delay is, in part, in consequence of the retention of the president by urgent business at the North, and domestic affliction since his return.

GEORGE FICKLIN, *Pres't.*  
THOMAS HILL, JR.,  
JAMES S. STARK,  
P. H. DUNCAN,*Directors.*

*Return of the state of the Hazel River Navigation Company for the year ending  
30th September 1851.*

**Capital stock \$91,000:**

Subscribed by individuals 302.36 shares, at \$100 each,	-	-	30,236 00
Subscribed by commonwealth 546 shares, at \$100 each,	-	-	54,600 00
Amount of outstanding debts, as far as settled,	-	-	9,743 17
Amount of outstanding debts closed by note,	-	-	394 87
Due to company on open account,	-	55 10	
Amount of individual subscriptions unpaid,	-	1,046 26	
Amount of commonwealth's subscriptions unpaid,	-	12,334 50	

**Expended in construction of work to this date, as follows:**

Tools,	-	-	1,354 95
Ficklen section,	-	-	16,679 85
Office expenses, books, &c.	-	-	47 69
Lewellen section,	-	-	6,705 57
Bedding,	-	-	391 80
Spring Valley section,	-	-	5,244 94
Rixey section,	-	-	8,609 27
Jones section,	-	-	10,061 08
Settle section,	-	-	6,984 23
Perishable property, one yoke of steers,	-	-	65 00
Casting for gates,	-	-	546 73
Dredging river,	-	-	3,760 00

**Agents and officers:**

President \$600; clerk \$300; superintendent in part \$660 90; president's expenses, commissions for col- lecting, &c.	-	-	2,083 42
Engineer's expenses,	-	-	528 27
Hurt section,	-	-	9,500 00
Wilford section,	-	-	8,071 81
Detention of sundry miles,	-	-	620 00

**Contigent expenses:**

Moving tools, paper, ink, &c. &c.	-	-	243 68
Interest account,	-	-	39 89

81,538 18

\$94,974 04      94,974 04

**By order of board of president and directors.**

**M. Y. PARTLOW, Clerk.**

## GUYANDOTTE NAVIGATION COMPANY.

*To the President and Directors  
of the Board of Public Works.*

GENTLEMEN,

The last general report furnished you was dated the 15th of March 1851. I have the honor of making to you a further report shewing the condition of the improvement of the Guyandotte river under the original organization of the Guyandotte navigation company: its operations were carried on during the spring and summer under the superintendence of Col. Cyrus Moore. During the latter part of the winter and the beginning of spring the superintendent contracted for large quantities of round timber, to be delivered at the different points on the river at which the improvements were to be made, suitable for building up the locks and dams. He also contracted for some 40 to 45,000 feet of three inch oak and poplar plank suitable for planking the locks and dams. These materials were delivered during the latter part of winter and spring. A part of the round timber has been used in building up the piers, and a portion of the plank has been used in planking the locks.

Capt. George McDaniels, the former engineer, returned from a visit to his family in Maine, and took charge of the works about the 20th of March. A small crew of hands was kept employed at each of the different points of the improvements in building up the piers and loading them with stone. The frequent rises of the river in the early part of the season prevented to a very great extent the prosecution of the works. During the rises in the river the hands were employed in stripping, quarrying and breaking up stone, or providing other materials.

In the month of June the stockholders held a meeting in the town of Guyandotte, for the purpose of taking into consideration the propriety of accepting the act passed the 4th of March 1851, increasing the capital stock of said company to \$200,000. The stockholders all being present, either in person or represented by proxy, it was unanimously agreed that they accept said act, and signify their acceptance in writing to the Board of public works.

About this time three of the five directors were appointed by the Board of public works, and as soon as the other two directors and the president of the board were elected by the stockholders, and the new board was organized, they at once made an investigation of the financial condition of the company, and ascertained that after paying all the liabilities of the company then due there would be a small sum, if any, of the first appropriation unexpended.

At a meeting of the board of directors in Barboursville on the 11th of August a resolution was passed calling a general meeting of the stockholders in the town of Guyandotte on the 25th of September, for the purpose of subscribing to the increased capital stock of said company, passed the 4th of March 1851.

At a meeting of the board on the 19th of August Col. Cyrus Moore was discharged as the superintendent, and shortly after, say the 26th of September, they discharged Capt. George McDaniels, the engineer, and at the same time passed a resolution suspending operations on the entire line of the improvement, believing that there were not means at the disposal of the board to pay the debts then due, and the directors were unwilling to incur any liability without the means at hand to pay. An individual being present who knew the situation of the lock at the falls and the great damage that must inevitably result to the works if left in the condition they were then in, insisted on having the lock finished up and the gates hung. The following order was then made :

Ordered, that C. L. Roffe be authorized, upon his own responsibility, to have the lock at the falls finished and the gates hung, there being doubts with the directory that there will be a want of funds to pay the liabilities of the company and finish the lock as above authorized ; but they agree to indemnify the said Roffe from any loss, in the event he finishes up the lock, by disposing of any property of the company they may have control of as directors to pay the same.

Under which order the work was at once commenced and finished up, the hands paid off and discharged on the 11th day of November : the lock is now ready for use.

Lock and dam No. 1 are one mile and a quarter from the mouth of the river. The shore pier is built up with timber, and loaded with stone within three feet of the top. The stream pier is built up with timber and loaded with stone within six feet of the top. The sides of the lock are planked about half way up, nothing has been done to the dam during this season. There are on hand some 5,000 to 6,000 feet of round timber for the dam, also some 1,000 to 1,500 feet five inch plank for piling and some 3 inch plank for the lock. All the castings are on hand for the gates.

Lock and dam No. 2 are located just above the mouth of Mud river, near the village of Barboursville, and six miles above lock and dam No. 1. The works at this place were commenced in the month of May. Camps of a suitable size for the accommodating of 40 to 50 hands, have been erected and furnished with bedding and all the necessary camp equipage. The stone quarry has been partially opened and some stone prepared for loading the piers and dam. There are some 25,000 to 30,000 feet of timber on the bank and ready to be delivered : all the square and flattened timber for the lock, and some 1,200 feet of railroad timber, and from 8,000 to 10,000 feet 3 inch oak plank for the lock and dam, and all the castings for the gates. As yet nothing has been done on the lock or dam.

Lock and dam No. 3 are located at Dusenbery's mill, twelve miles from the mouth of the river. This lock is now ready for use and has been since the first of August. (There still remain some filling up of one of the piers with stone and about one-fourth of the top of the piers to be planked over.)

Lock and dam No. 4 are located about 24 miles from the mouth of the river and about 12 miles above lock No. 3. The dam is now 13 feet high. The stream pier is twenty-four feet high, and is finished

up the whole length and well loaded with stone, and is planked up over the lift and from the lift down is planked about five feet. The shore pier is built up about forty feet at the head and about eight feet at the lower end, and loaded with stone, and is planked up over the lift and from the lift down about five feet. Owing to an unforeseen defect in one of the piling planks, during the month of November 1850 the water forced its way round the shore pier on the west bank, washing out a channel 150 to 200 feet wide and from 12 to 16 feet deep. Owing to this wash the shore pier at the lower end has been more or less damaged, perhaps so much so as to make it necessary to take down a portion of the pier and rebuild it from the bottom. In obedience to a resolution of the board of directors, Captain George McDaniels surveyed and made an estimate of the probable expense of repairing the breach, building up the pier, finishing the lock and hanging the gates, exclusive of iron—\$6,871, estimating the round timber to cost 4 cents per foot running measure. At this lock there are on the river bank some 8,000 to 10,000 feet round timber, about 20,000 feet 3 inch oak and poplar plank for planking the lock and dam, and all the castings for the gates. The gates are framed and the plank jointed and grooved for planking the gates. From a recent survey of the river, it appears from the engineer's report that this dam will have to be raised some 3 feet higher in order to give sufficient water in the lock at the falls.

Lock and dam No. 5 are at the Old falls, some 30 miles from the mouth of the river. This lock is nearly completed; it is now ready for use. The lock at this point is placed in the channel of the river, with a wing pier, extending one to the east bank and the other to the ledge on the west, raising the water some 9 feet and throwing it in the original channel. As yet nothing has been done to the dam; it will be 250 feet long, the east end connecting with the pier and the west end to a rock rising some 7 or 8 feet in the bank. The dam will be built on a ledge extending across the river and will be 6 feet high, and is estimated to cost from \$800 to \$900. Inasmuch as the navigation of the river at this point was good and the community is not in the least benefited by the improvement, the directors deemed it inexpedient to levy a toll as a revenue, but allowed the lock-keeper to charge 25 cents for each time he might be called on to open the gates, only as a compensation for his services.

It was thought advisable to put in a wing dam, to extend from the west end of the wing pier down the river, to throw the weight of water from the pier and the bank immediately below the foot of the lock on the east side of the river. This dam is built by placing one log on the ledge and bolting it down with  $1\frac{1}{2}$  inch bolts driven in the rock from 18 inches to 2 feet; the lower end of the bolt is split, a key wedge is placed in the end; it is then well driven. The top of the log is plated and a second log is placed on the first and well bolted to it with bolts of the same size; braces are then let into the top log and well bolted to it, the other end of the brace let into the ledge and securely bolted to it. The dam is from 3 to 4 feet high, and is braced every 10 feet. This wing dam, it is believed, will answer the purpose.

ended, completely throwing the weight of water on the bank immediately below the foot of the lock. The lock, and previous to the finishing the lock had command with the least weight of water running against it, would have moved to fall in; therefore the importance of the consultation of the superintendent with some of the engineers. It was thought advisable to rent the saw mill of which was accordingly done at a rent of \$200 per month for the season, some 30 to 35,000 feet of three inch oak timber have been sawed; a portion of it was boated down the river and is on hand: there still remain at the mill 8,000

feet of timber contemplated to raise dam No. 3 three feet higher, to have sufficient water in lock No. 4, but from a survey of the river during the summer, between locks No. 3 and 4, it was found that raising dam No. 3 three feet higher would not give sufficient water in lock No. 4 in time at low water in the river. The damage that would result to the country along the river between the two locks, and the increased difficulty of securing the water under such a great weight of water—the many objections of the citizens on the river, and the large amount of damages the company would have, in all probability, to pay for the overflowing of the river, are sufficient reasons to induce them to abandon the idea of raising dam No. 3 any higher. Hence, the necessity of putting in another dam half way between locks Nos. 3 and 4, of about 7 feet high. The lock and dam will be located near the mouth of Smith's creek. The ridge extends about half across the river, dipping to the east; the west bank is soft sand. The lock will be placed on the east side of the river; the rock rises in the west bank some ten to fifteen feet; the dam will be from 200 to 250 feet long. Suitable rock for loading the lock and dam can be had conveniently.

In regard to the disbursement of the company's funds, I would beg to refer you to the statement of the secretary, herewith enclosed.

With respect to the early completion of the improvement, it is looked to with much interest and solicitude. The immense quantities of valuable timber growing on the Guyandotte river and its tributaries, and the inexhaustible beds of coal found in the mountains, varying in thickness from three to ten feet, of a very superior quality, together with the favorable prospect of iron, salt and lime—all of which must find an outlet to market through this improvement. The valley of the Guyandotte river is rich and fertile, and when cleared up produces fine grazing, and will be one of the finest stock raising and wool growing sections of the United States. It is the prevailing opinion, that this improvement, so soon as completed, will yield a handsome dividend to the stockholders generally, and will in a few years greatly increase the revenue of the state from the enhanced value of real estate on the Guyandotte river.

It is the opinion of the board, that the interest of the company would be greatly promoted by securing the water privilege now owned by W. C. Dusenbury. Steps preparatory to securing that property would

have been taken last season, but the directory thought it more advisable to lay the subject before the stockholders for their consideration before taking action in the premises.

It is believed, with the experience and knowledge now acquired, the improvements can be completed on more favorable terms for the interest of the company than what has been done. When the improvements now under way are completed, the river will be navigable a distance of thirty-five miles.

All of which is most respectfully submitted.

On behalf of the board of directors.

CHARLES L. ROFFE,  
*Pres. Guyandotte Nav. Co.*

*Ashland, Va., Dec. 31, 1851*



*Estimate of the probable expense of finishing up the improvement now under way.*

Dams and finishing lock No. 1,	-	-	-	-	3,500 00
Lock and dam No. 2,	-	-	-	-	15,000 00
Finishing lock and removing dam No. 3,	-	-	-	-	200 00
New lock and dam, Smith's creek,	-	-	-	-	51,000 00
Lock and wing dam No. 4,	-	-	-	-	6,871 00
Iron and raising dam 3 feet,	-	-	-	-	650 00
Dam and finishing lock No. 5,	-	-	-	-	1,500 00
					<u>42,521 00</u>
By materials on hand :					
By round timber and plank No. 1, and castings,	-	-	-	455 00	
Round timber, plank, castings, square and flatted timber,	-	-	-	2,545 00	
Round timber, plank, castings, pins, No. 4,	-	-	-	1,490 00	
Iron, steel, &c.	-	-	-	225 00	
Tools, bedding and cooking utensils,	-	-	-	365 00	
				<u>5,080 00</u>	
					<u>\$37,641 00</u>

CHARLES L. ROFFE.

Ashland, Va., Dec. 31, 1851.

## RECEIPTS.

For amount capital stock received from individuals,	-	-	28,500 00
For amount capital stock received from state,	-	-	42,750 00
Total receipts,	-	-	<u>\$ 71,250 00</u>

## DISBURSEMENTS.

For outfitting, including tools, shanties, &c.	-	-	5,042 73
For labor, including salaries of officers,	-	-	33,703 88
For lumber, including timber,	-	-	13,276 66
For provisions, including board of men,	-	-	8,172 85
For iron and steel,	-	-	3,183 34
For feed for cattle, &c.	-	-	1,336 14
For powder for blasting,	-	-	1,374 00
For damages,	-	-	2,058 00
For interest, for collecting, &c.	-	-	26 20
For amount overpaid individuals on books,	-	-	227 80
For balance in the hands of treasurer, uncalled for by creditors,	-	-	2,847 50
			<u>\$ 71,250 00</u>

J. W. HITE, *Secretary*.

Dec. 31, 1851.

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Engineer's salary \$104 per month—paid \$4 per day.  
 Superintendent's salary \$1,200 per annum.  
 Treasurer's salary \$850—paid him up 27th August 1851.  
 Secretary's salary \$2 per day for the time employed.

*Statement of the Secretary of the Guyandotte Navigation Company, made  
December 31, 1851.*

Capital stock, \$75,000:

Amount subscribed by individuals,	-	-	30,000 00
Amount snbscribed by state of Virginia,	-	-	45,000 00
Amount due on books account for sundries,	-	-	6,577 53
For amount of individual subscription unpaid,		1,500 00	
amount of state subscription unpaid,	-	2,250 00	
amount due by sundries on book account,	-	227 80	

Expended in the construction of the work from June 16,  
1850, to Dec. 31, 1851, viz:

For labor, including salaries of officers,	-	-	35,288 40
lumber, including timber and plank,	-	-	18,082 24
provisions, including board of hands,	-	-	8,244 84
outfitting, including tools, and shanties, &c.,	-	-	5,076 17
iron and steel,	-	-	3,183 34
feed for cattle, &c.	-	-	1,418 14
powder for blasting,	-	-	1,374 90
damages as far as settled on,	-	-	2,058 00
interest—for amount paid expenses in collection of money and paid to individuals,	-	-	26 20
balance in the hands of the treasurer uncalled for by the creditors,	-	-	2,847 50
			<u>\$ 81,577 53</u>
			<u>81,577 53</u>

J. W. HITE, *Secretary.*

*Officers.*

Charles L. Roffe, president; Henry McFarland, John W. Hite, Solomon Thornburg, G. C. Rickets, Irvin Luskie, directors; Charles L. Roffe, state proxy; Henry H. Miller, treasurer; J. W. Hite, secretary; Charles L. Roffe, superintendent.















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